# WX-7700MDX

# SERVICE MANUAL

*E Model*

**Ver 1.0 2002.06**

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| | | |
|---|---|---|
| CD Section | Model Name Using Similar Mechanism | NEW |
| | CD Mechanism Type | MG-398D-121 |
| | Optical Pick-up Name | KSS-720A |
| MD Section | Model Name Using Similar Mechanism | NEW |
| | MD Mechanism Type | MG-164MF-138 |
| | Optical Pick-up Name | KMS-241C |

## SPECIFICATIONS

### CD/MD Player section

| | |
|---|---|
| Signal-to-noise ratio | 95 dB |
| Frequency response | 10 – 20,000 Hz |
| Wow and flutter | Below measurable limit |

### Tuner section

#### FM

| | |
|---|---|
| Tuning range | FM tuning interval:<br>50 kHz/200 kHz switchable<br>87.5 – 108.0 MHz<br>(at 50 kHz step)<br>87.5 – 107.9 MHz<br>(at 200 kHz step) |
| Aerial terminal | External aerial connector |
| Intermediate frequency | 10.7 MHz/450 kHz |
| Usable sensitivity | 8 dBf |
| Selectivity | 75 dB at 400 kHz |
| Signal-to-noise ratio | 66 dB (stereo),<br>74 dB (mono) |
| Harmonic distortion at 1 kHz | 0.4 % (stereo),<br>0.3 % (mono) |
| Separation | 35 dB at 1 kHz/WIDE |
| Frequency response | 30 – 15,000 Hz |

#### AM

| | |
|---|---|
| Tuning range | AM tuning interval:<br>9 kHz/10 kHz switchable<br>531 – 1,602 kHz<br>(at 9 kHz step)<br>530 – 1,710 kHz<br>(at 10 kHz step) |
| Aerial terminal | External aerial connector |
| Intermediate frequency | 10.7 MHz/450 kHz |
| Sensitivity | 30 µV |

### Power amplifier section

| | |
|---|---|
| Outputs | Speaker outputs<br>(sure seal connectors) |
| Speaker impedance | 4 – 8 ohms |
| Maximum power output | 52 W × 4 (at 4 ohms) |

### General

| | |
|---|---|
| Outputs | Audio outputs (front/rear)<br>Subwoofer output (mono)<br>Power aerial relay control terminal<br>Power amplifier control terminal |
| Inputs | Telephone ATT control terminal<br>Illumination control terminal<br>BUS control input terminal<br>BUS audio input terminal<br>AUX IN terminal<br>Aerial input terminal |
| Power requirements | 12 V DC car battery (negative earth) |
| Dimensions | Approx. 178 × 100 × 194 mm (w/h/d) |
| Mounting dimensions | Approx. 178 × 100 × 165 mm (w/h/d) |
| Mass | Approx. 3.0 kg |
| Supplied accessories | Parts for installation and connections (1 set)<br>Card remote commander RM-X110 |

***Note***

*This unit cannot be connected to a digital preamplifier or an equalizer.*

*Design and specifications are subject to change without notice.*

## MULTI CONTROL AUDIO MASTER

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2002F0500-1
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**Sony Corporation**
**e Vehicle Company**
**Published by Sony Engineering Corporation**

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## NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

## FOR CD

### NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

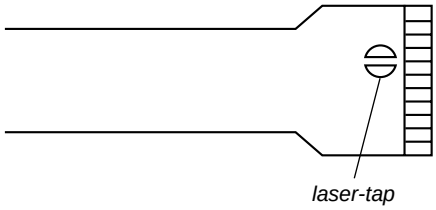
## FOR MD

### NOTES ON LASER DIODE EMISSION CHECK

Never look into the laser diode emission from right avove when checking it for adustment. It is feared that you will lose your sight.

### NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK (KMS-241C)

The laser diode in the optical pick-up block may suffer electrostatic break-down easily. When handling it, perform soldering bridge to the laser-tap on the flexible board. Also perform m easur es against electrostatic break-down sufficiently before the operation. The flexible board is easily damaged and should be handled with care.




***OPTICAL PICK-UP FLEXIBLE BOARD***

### Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

### Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

### Notes on CD-R/CD-RW discs

- You can play CD-Rs (recordable CDs)/CD-RWs (rewritable CDs) designed for audio use on this unit.
  Look for these marks to distinguish CD-Rs/CD-RWs for audio use.

These marks denote that a disc is not for audio use.

- Some CD-Rs/CD-RWs (depending on the equipment used for its recording or the condition of the disc) may not play on this unit.
- You cannot play a CD-R/a CD-RW that is not finalized*.

  ** A process necessary for a recorded CD-R/CD-RW disc to be played on the audio CD player.*

### UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

### : LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 ˚C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 ˚C .
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

**SAFETY-RELATED COMPONENT WARNING!!**

**COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.**

## TABLE OF CONTENTS


**1. SERVICING NOTES** ..... 4

**2. GENERAL**
Location of Controls ..... 5

**3. DISASSEMBLY**
3-1. Disassembly Flow ..... 10
3-2. Front Panel Section ..... 11
3-3. DISPLAY Board ..... 11
3-4. Chassis (T) Section ..... 12
3-5. MD Mechanism Deck (MG-164MF-138) ..... 12
3-6. POWER Board, Chassis (T) Assy ..... 13
3-7. Heat Sink ..... 13
3-8. SERVO (MD) Board ..... 14
3-9. MD Cover Assy ..... 14
3-10. Float Block ..... 15
3-11. LO Motor Assy ..... 15
3-12. Lever Assy (LE) ..... 16
3-13. Holder Assy ..... 16
3-14. Chucking ARM Assy ..... 17
3-15. Optical Pick-up (KMS-241C) ..... 17
3-16. SL Motor Assy (SLED) (M902)/ SP Motor Assy (SPINDLE) (M901) ..... 18
3-17. CD Mechanism Deck (MG-398D-121) ..... 18
3-18. Motor Assy (Front Panel Open/Close) (M640) ..... 19
3-19. MAIN Board, Chassis (B) Assy ..... 19
3-20. Bracket (MAIN) ..... 20
3-21. Chassis (T388) Assy ..... 20
3-22. Sensor (CD) Board ..... 21
3-23. Servo Board, LO Motor SUB Assy (Loading) (M103) ..... 21
3-24. ARM Roller Assy, LOAD Board ..... 22
3-25. Floating Block Assy ..... 22
3-26. Optical Pick-up (KSS-720A), Sled Motor Assy (M101) ..... 23

**4. ASSEMBLY**
4-1. Assembly of ARM (L/R) Assy ..... 23

**5. DIAGRAMS**
5-1. Block Diagram – CD SERVO Section – ..... 24
5-2. Block Diagram – MD SERVO Section – ..... 25
5-3. Block Diagram – MAIN Section – ..... 26
5-4. Block Diagram – DISPLAY/BUS CONTROL Section – ..... 27
5-5. Block Diagram – POWER SUPPLY Section – ..... 28
5-6. Note for Printed Wiring Boards and Schematic Diagrams ..... 29
5-7. Printed Wiring Boards – CD Section (1/2) – ..... 30
5-8. Printed Wiring Board – CD Section (2/2) – ..... 31
5-9. Schematic Diagram – CD Section – ..... 32
5-10. Printed Wiring Boards – MD Section – ..... 33
5-11. Schematic Diagram – MD Section (1/2) – ..... 34
5-12. Schematic Diagram – MD Section (2/2) – ..... 35
5-13. Printed Wiring Boards – MAIN Board (Component Side) – ..... 36
5-14. Printed Wiring Board – MAIN Board (Conductor Side) – ..... 37
5-15. Schematic Diagram – MAIN Board (1/4) – ..... 38
5-16. Schematic Diagram – MAIN Board (2/4) – ..... 39
5-17. Schematic Diagram – MAIN Board (3/4) – ..... 40
5-18. Schematic Diagram – MAIN Board (4/4) – ..... 41
5-19. Printed Wiring Board – DISPLAY Board (Component Side) – ..... 42
5-20. Printed Wiring Boards – DISPLAY Board (Conductor Side) – ..... 43
5-21. Schematic Diagram – DISPLAY Board (1/2) – ..... 44
5-22. Schematic Diagram – DISPLAY Board (2/2) – ..... 45
5-23. Printed Wiring Board – KEY Board (Component Side) – ..... 46
5-24. Printed Wiring Board – KEY Board (Conductor Side) – ..... 47
5-25. Schematic Diagram – KEY Board – ..... 48
5-26. Schematic Diagram – SUB/POWER Boards – ..... 49
5-27. Printed Wiring Board – POWER Board (Component Side) – ..... 50
5-28. Printed Wiring Boards – POWER Board (Conductor Side)/SUB Board – ..... 51
5-29. IC Pin Function Description ..... 63

**6. EXPLODED VIEWS**
6-1. MAIN Section ..... 78
6-2. SUB Panel SUB Assy Section ..... 79
6-3. Front Panel Section ..... 80
6-4. Front Panel SUB Section ..... 81
6-5. DISPLAY Board Section ..... 82
6-6. Chassis (T) Assy Section ..... 83
6-7. Chassis (B) Assy Section-1 ..... 84
6-8. Chassis (B) Assy Section-2 ..... 85
6-9. MD Mechanism Deck Section-1 (MG-164MF-138) ..... 86
6-10. MD Mechanism Deck Section-2 (MG-164MF-138) ..... 87
6-11. MD Mechanism Deck Section-3 (MG-164MF-138) ..... 88
6-12. CD Mechanism Deck Section-1 (MG-398D-121) ..... 89
6-13. CD Mechanism Deck Section-2 (MG-398D-121) ..... 90
6-14. CD Mechanism Deck Section-3 (MG-398D-121) ..... 91

**7. ELECTRICAL PARTS LIST** ..... 92

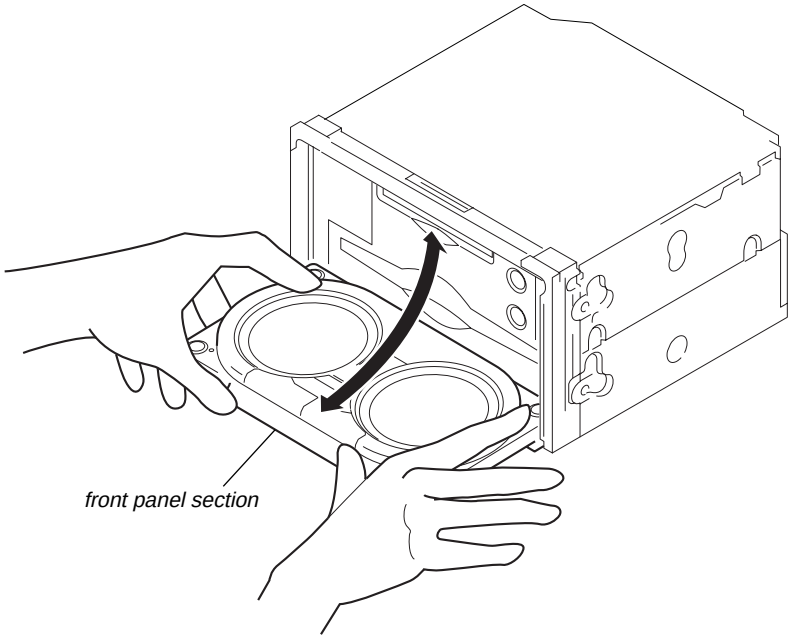
# SECTION 1
# SERVICING NOTES

## TEST DISC

This set can playback a CD-R, CD-RW for audio use.
When test this set, use the following test disc.
Test disc for CD-R: TCD-R082LMT (Part No.: J-2502-063-1)
Test disc for CD-RW: TCD-W082L (Part No.: J-2502-063-2)

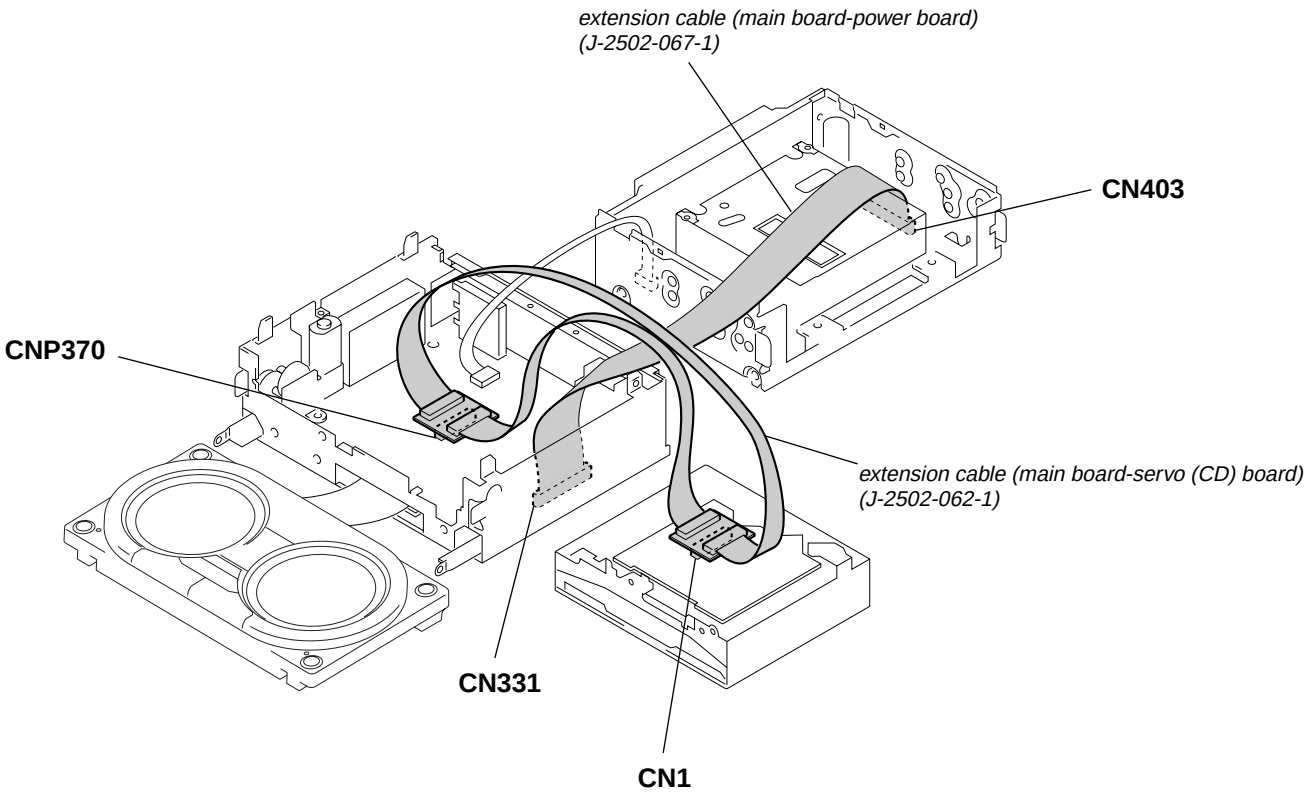
## OPENING AND CLOSING OF FRONT PANEL SECTION IN AN ELECTRIC INTERRUPTION STATE

Don't apply impossible power, but open and close slowly with both hands.




## JIG ON REPAIRING

When repairing this set, etc., connect the extension cable as the figure shown below.

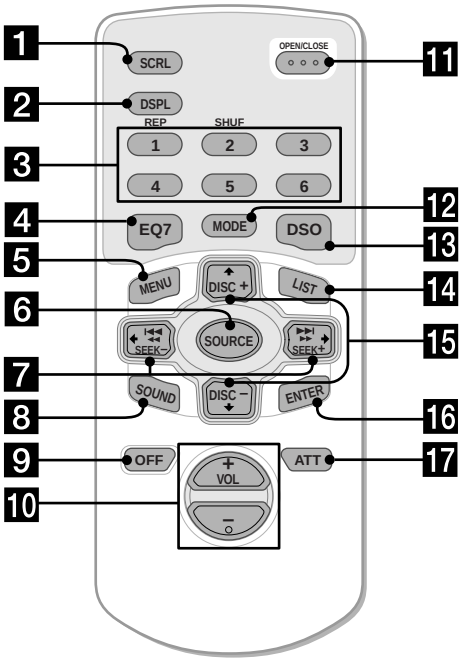


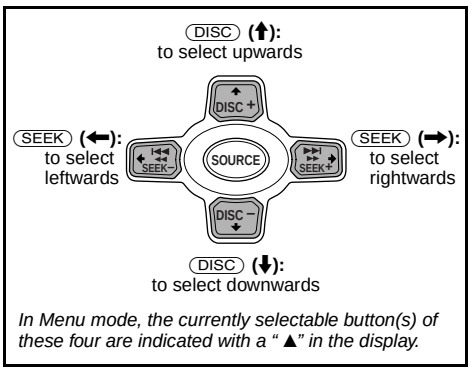
SECTION 2
GENERAL

This section is extracted from instruction manual.

## Location of controls

***Card remote commander RM-X110***




*In Menu mode, the currently selectable button(s) of these four are indicated with a "▲" in the display.*

***Note***

*If the unit is turned off by pressing (OFF) for 2 seconds, the unit cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.*

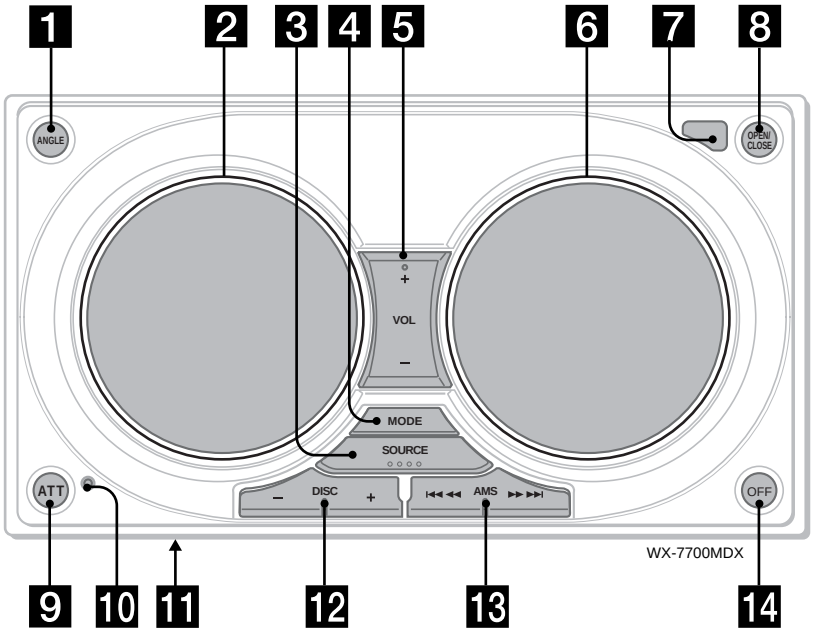
***Tip***

*Refer to "Replacing the lithium battery" for details on how to replace the batteries.*

**Instructions in this manual describe how to use the unit by mainly using the card remote commander.**

**1 SCRL (scroll) button**
**2 DSPL (display mode change) button**
**3 Number buttons**
(1) **REP**
(2) **SHUF**
To store stations/receive stored stations.
**4 EQ7 button**
**5 MENU button**
To display the menus.
**6 SOURCE (Power on/Radio/CD/MD/ AUX-Audio) button**
To select the source.
**7 SEEK (←/→) buttons**
To skip tracks/fast-forward, reverse a track/ tune in stations automatically, find a station manually/select a setting.
**8 SOUND button**
**9 OFF (Stop/Power off) button**
**10 VOL (+/–) buttons**
To turn up or down the volume.
**11 OPEN/CLOSE button**
**12 MODE button**
To change the operation.
**13 DSO button**
**14 LIST button**
**15 DISC (↑/↓) buttons**
To receive preset stations/change the disc*/ select an item in Menu.
* *When an optional CD/MD unit is connected.*
**16 ENTER button**
To enter a setting.
**17 ATT button**

## *Controls of the unit*



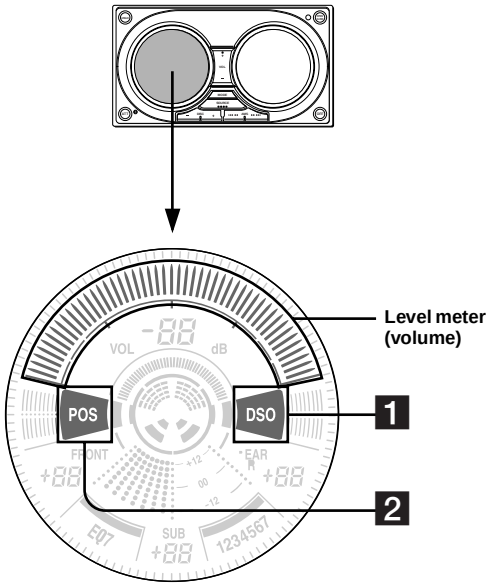

**The buttons on the unit share the same functions as those on the card remote commander.**

1 **ANGLE button**
2 **Sound window**
3 **SOURCE button**
4 **MODE button**
5 **VOL (+/–) button**
6 **Operation window**
7 **Receptor for the card remote commander**
8 **OPEN/CLOSE button**
9 **ATT button**
10 **Reset button**
11 **Frequency select switch** (located on the bottom of the unit)
See “Frequency select switch” in the Installation/Connections manual.
12 **DISC (–/+) buttons**
13 **AMS (I◀◀ ◀◀/▶▶ ▶▶I) buttons**
AMS (I◀◀ ◀◀/▶▶ ▶▶I) buttons share the same functions as SEEK (⬅/➡) buttons on the card remote commander.
14 **OFF (Stop/Power off) button***

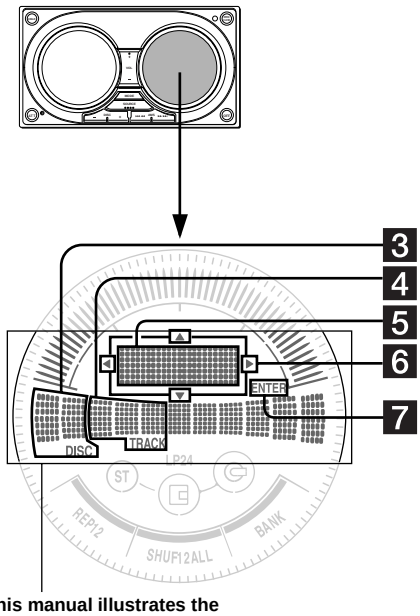
* **Warning when installing in a car without an ACC (accessory) position on the ignition switch**
After turning off the ignition switch, be sure to press (OFF) on the unit for 2 seconds to turn off the clock display.
Otherwise, the clock display does not turn off and this causes battery drain.

## Display windows

***Sound window***




***Operation window***




**This manual illustrates the operation window mainly.**

**1 DSO**
Lights up while you are setting the DSO mode.

**2 POS**
Lights up while you are setting the POS mode.

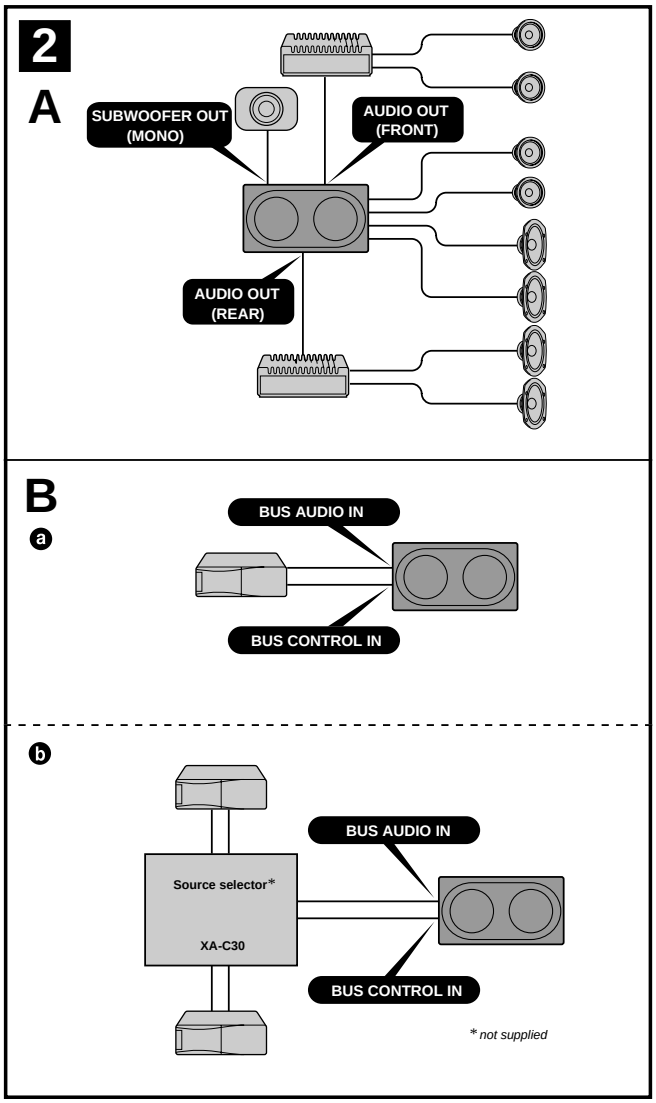
**3 DISC number**
Appears only when an optional CD/MD unit is connected and a disc in the optional unit is played.

**4 Track number**
Appears during CD/MD playback.

**5 Various items for a setting or a source**

**6 Cursor directions**
The selectable cursor direction appears as a "▲".
By pressing a cursor button (↑/→/↓/←) in the same direction as any "▲" that appears, you can select an item or proceed with the operation.

**7 ENTER**
Appears when it's necessary to press ENTER after you select an item.




## Cautions

- This unit is designed for negative earth 12 V DC operation only.
- Do not get the wires under a screw, or caught in moving parts (e.g. seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the **yellow** and **red** power input leads only after all other leads have been connected.
- **Run all earth wires to a common earth point.**
- Be sure to insulate any loose unconnected wires with electrical tape for safety.

**Notes on the power supply cord (yellow)**

- When connecting this unit in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
- When no car circuits are rated high enough, connect the unit directly to the battery.

## Parts list (1)

The numbers in the list are keyed to those in the instructions.

## Connection example (2)

***Notes* (2-A)**

- *Be sure to connect the earth lead before connecting the amplifier.*
- *If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.*

***Tip* (2-B-b)**

*For connecting two or more changers, the source selector XA-C30 (optional) is necessary.*

## Connection diagram (3)

When inserting each connector, be sure to insert securely, as vibration through driving may cause a poor connection.

❶ **To a metal surface of the car**
*Make sure to connect the black earth lead first of all, then proceed with connection steps ❷-❼. Check the black earth lead is connected properly, before connecting the orange/white striped lead, yellow and red power input leads.*

❷ **To AMP REMOTE IN of an optional power amplifier**
*This connection is only for amplifiers. Connecting any other system may damage the unit.*

❸ **To the power aerial control lead or power supply lead of aerial booster amplifier**
***Notes***
- *It is not necessary to connect this lead if there is no power aerial or aerial booster, or with a manually-operated telescopic aerial.*
- *When your car has a built-in FM/AM aerial in the rear/side glass, see "Notes on the control and power supply leads."*

❹ **To the interface cable of a car telephone**

❺ **To a car's illumination signal**
*Be sure to connect the black earth lead to it first.*

❻ **To the +12 V power terminal which is energized in the accessory position of the ignition key switch**
***Notes***
- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.*
  *Be sure to connect the black earth lead to it first.*
- *When your car has a built-in FM/AM aerial in the rear/side glass, see "Notes on the control and power supply leads."*

❼ **To the +12 V power terminal which is energized at all times**
*Be sure to connect the black earth lead to it first.*

***Notes on the control and power supply leads***

- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *When your car has built-in FM/AM aerial in the rear/side glass, connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without relay box cannot be used with this unit.*

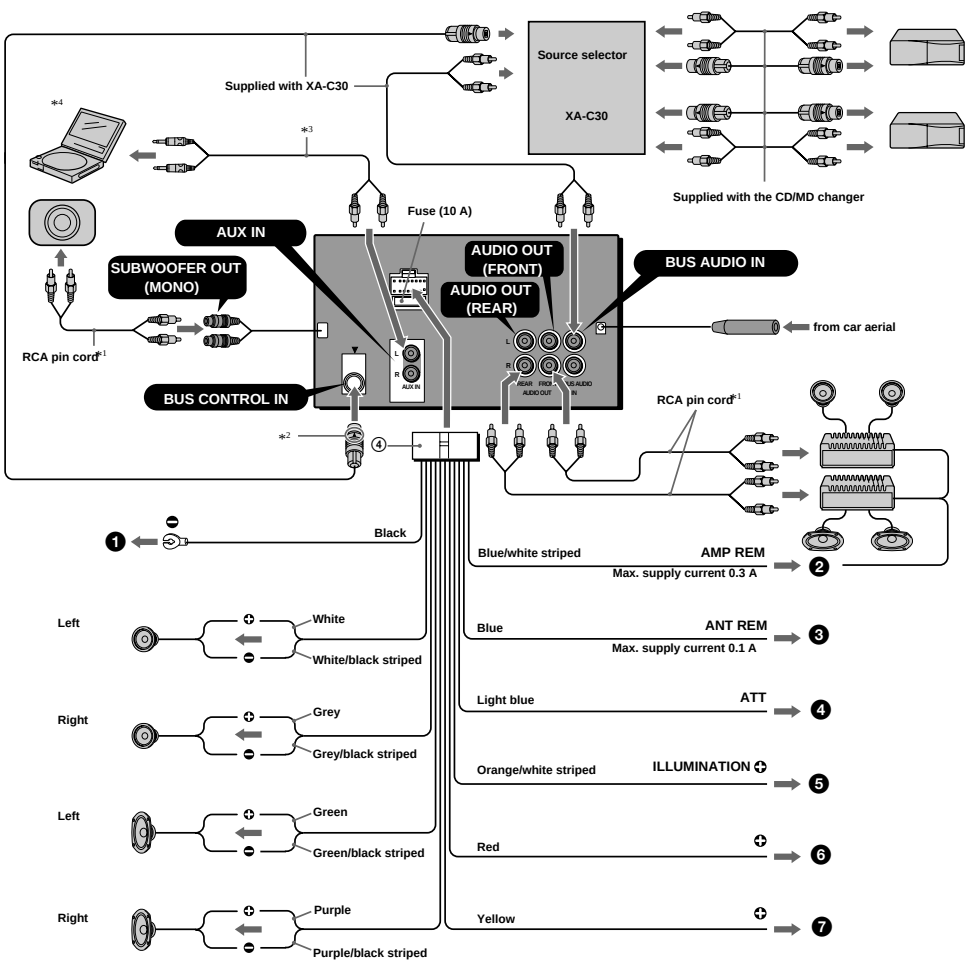
***Memory hold connection***

*When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.*

***Notes on speaker connection***

- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the earth lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker wires installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker cords to each other.*

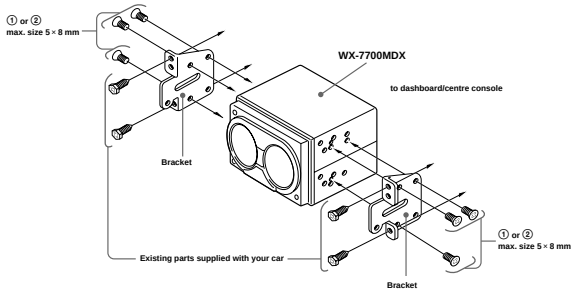
## 3



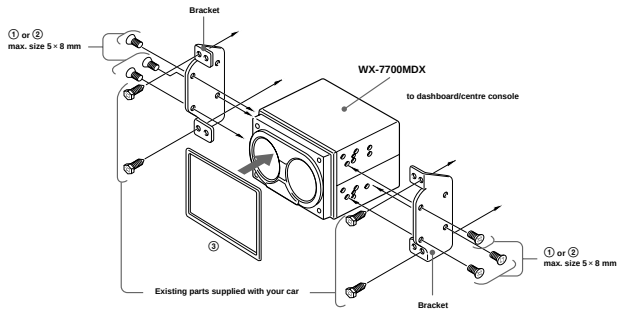

*1 not supplied
*2 Connect the Bus cable to its terminal with the unit's ▼ mark and the Bus cable's ▲ mark aligned.
*3 supplied with the auxiliary equipment
*4 Auxiliary optional equipment such as portable DVD player (not supplied)

## 4 A TOYOTA/MITSUBISHI

This illustration is for TOYOTA cars.

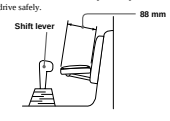



## B NISSAN




### Precautions

- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperatures, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.
  To open/close the front panel smoothly, to insert/eject a disc easily, and especially to drive safely, a certain distance between the front panel and the shift lever is necessary. The necessary distance differs, depending on the shift lever position of your car. Before installing the unit, choose the installation location carefully so that you can drive safely.

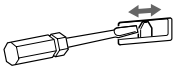



**Mounting angle adjustment**

Adjust the mounting angle to less than 30°.

### Frequency select switch

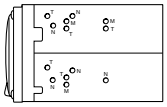
The AM (FM) tuning interval is factory-set to the 9 k (50 k) position. If the frequency allocation system of your country is based on 10 kHz (200 kHz) interval, set the switch **on the bottom of the unit** to the 10 k (200 k) position before making connections.
After the frequency select switch is set, you must press the reset button to reset the unit.



### Mounting the unit in a Japanese car (4)

You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your Sony dealer.

When mounting this unit to the preinstalled brackets of your car, use the supplied screws ① or ② in the appropriate screw holes, according to your vehicle: T for TOYOTA, M for MITSUBISHI, and N for NISSAN.



*Notes*

- *Use the screws ① or ② depending on the make of car. When this unit is attached to a MITSUBISHI car, use the supplied screws ②.*
- *To prevent malfunction, be sure to install using brackets and the supplied screws ① or ②.*
- *Do not apply excessive force to the buttons of the unit.*
- *Do not push on the display window.*
- *Before mounting, make sure there is nothing on the top of the unit.*

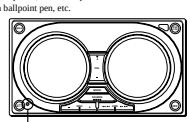
### Warning when installing in a car without ACC (accessory) position on the ignition key switch

**Be sure to press (OFF) on the unit for two seconds to turn off the clock display after turning off the engine.**

When you press (OFF) only momentarily, the clock display does not turn off and this causes battery wear.

### Reset button

When the installation and connections are completed, be sure to press the reset button with a ballpoint pen, etc.



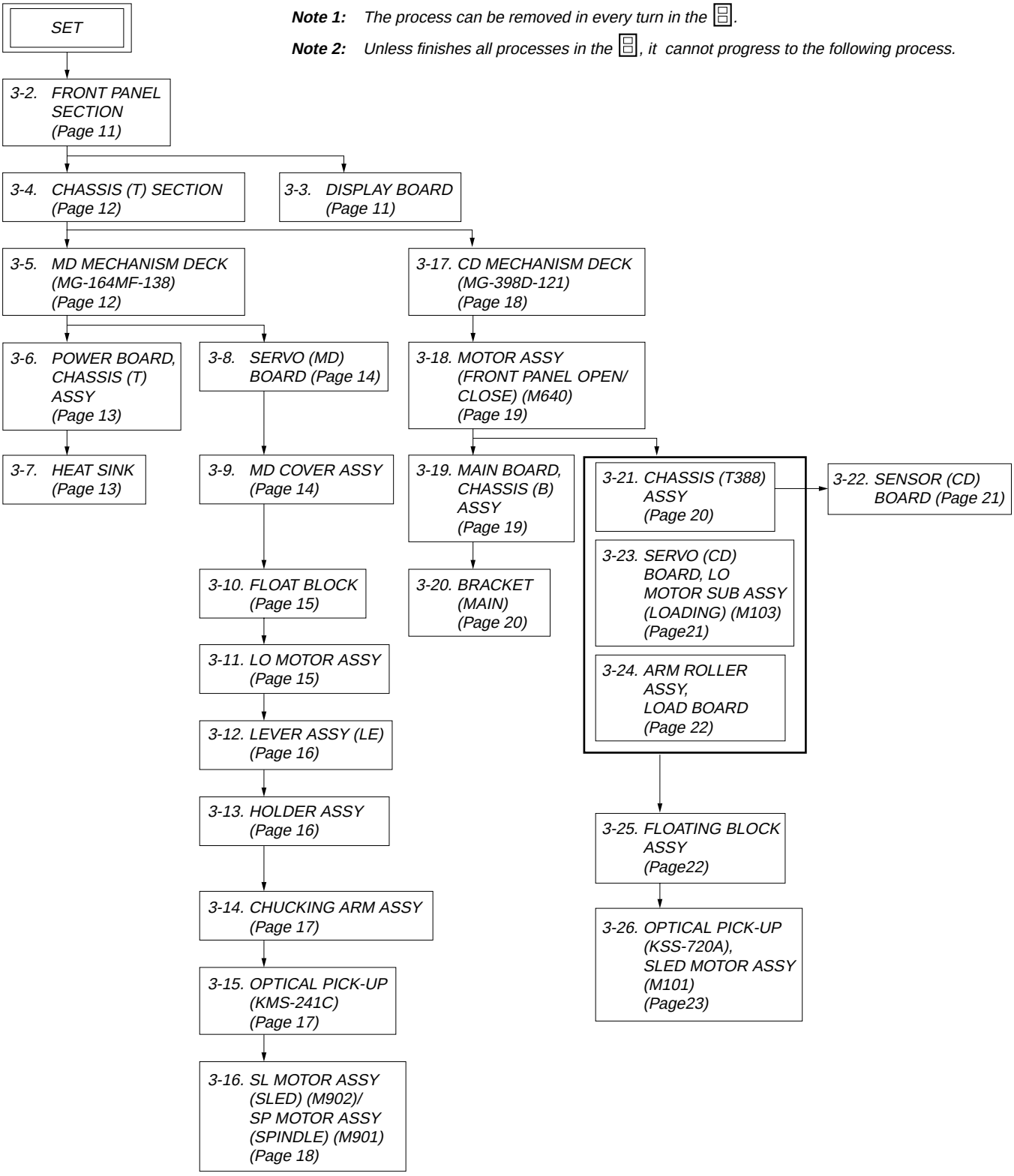

*Note*

*When you connect the power supply cord to the unit or reset the unit, wait for about 10 seconds before you insert a disc. If you insert a disc within these 10 seconds, the unit will not be reset, and you will have to press the reset button again.*

# SECTION 3
# DISASSEMBLY

• This set can be disassembled in the order shown below.

## 3-1. DISASSEMBLY FLOW

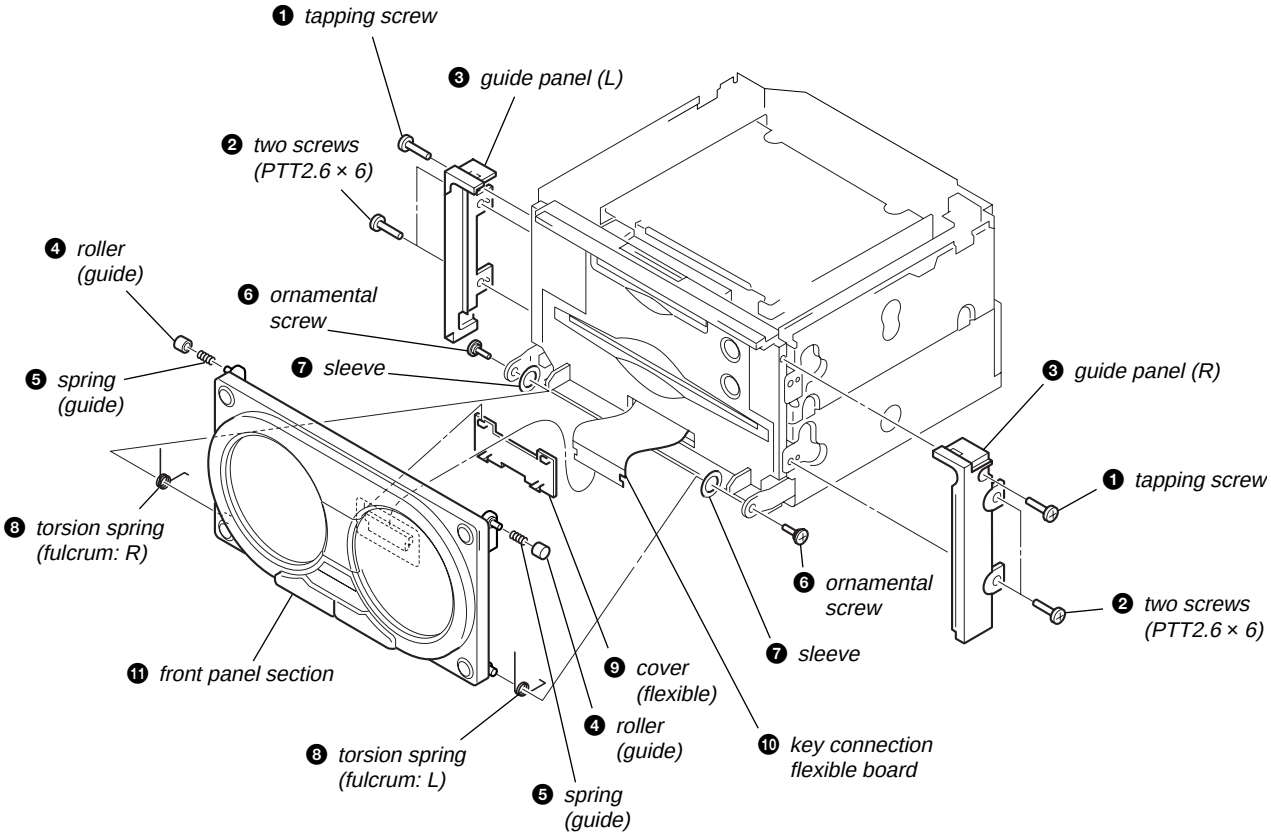



***Note 1:*** *The process can be removed in every turn in the* ▣.

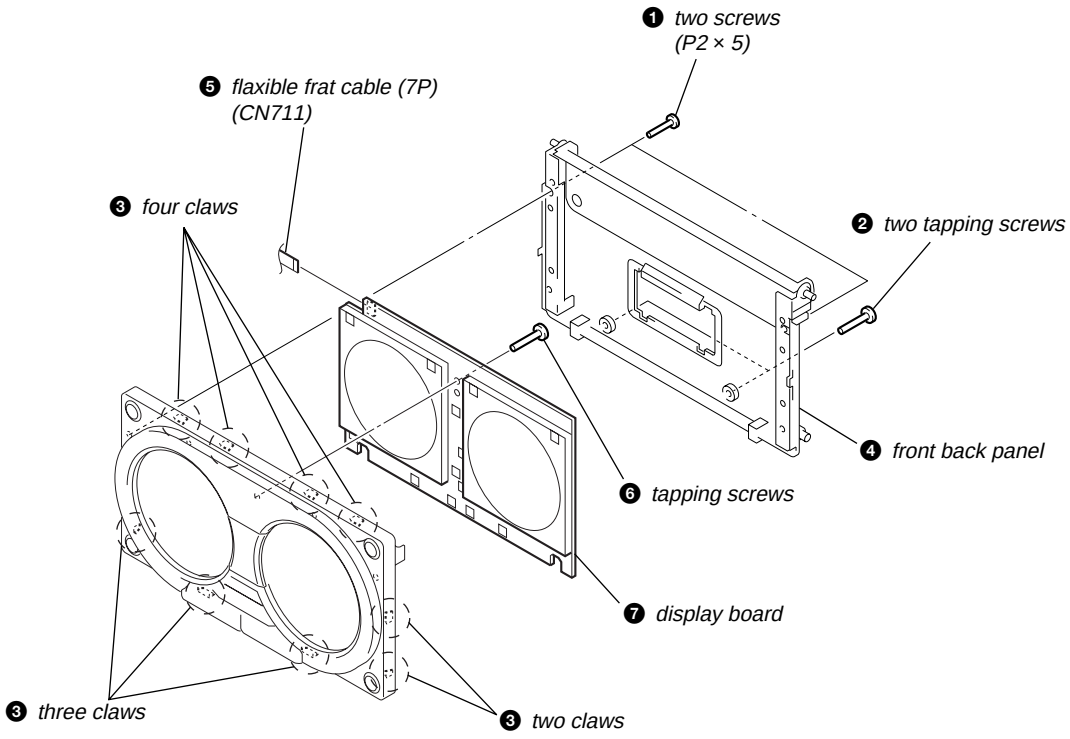
***Note 2:*** *Unless finishes all processes in the* ▣*, it cannot progress to the following process.*

**Note:** Follow the disassembly procedure in the numerical order given.

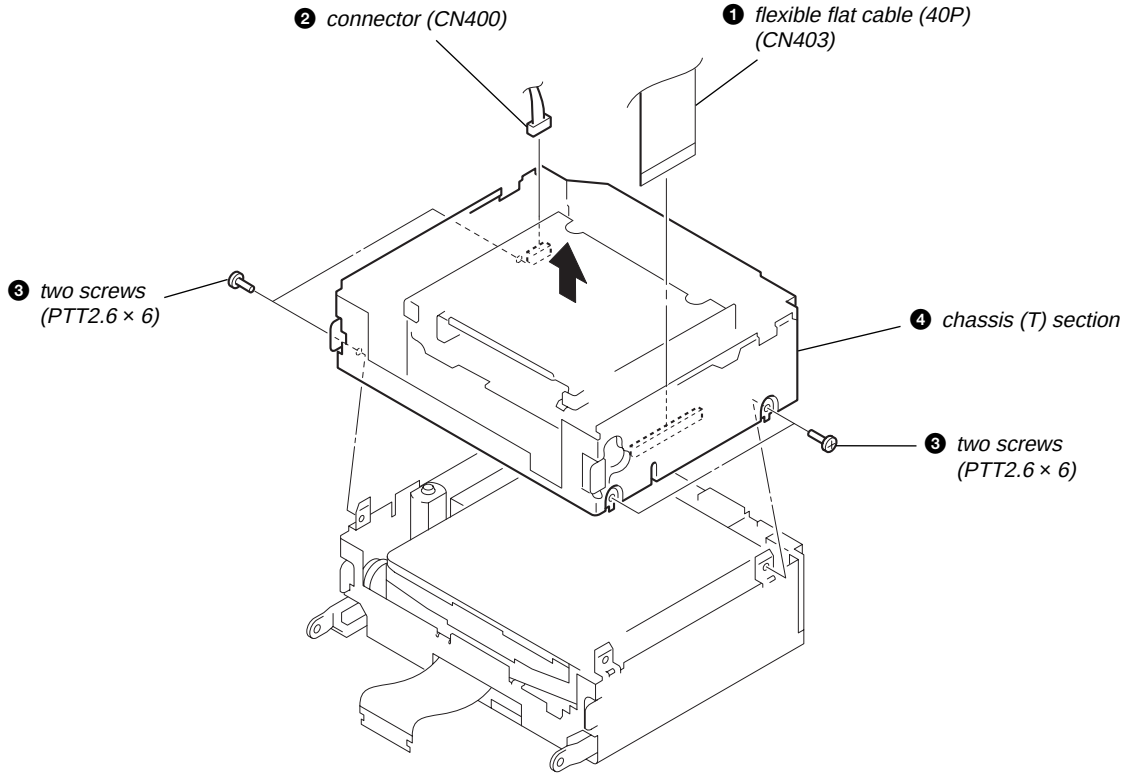
## 3-2. FRONT PANEL SECTION



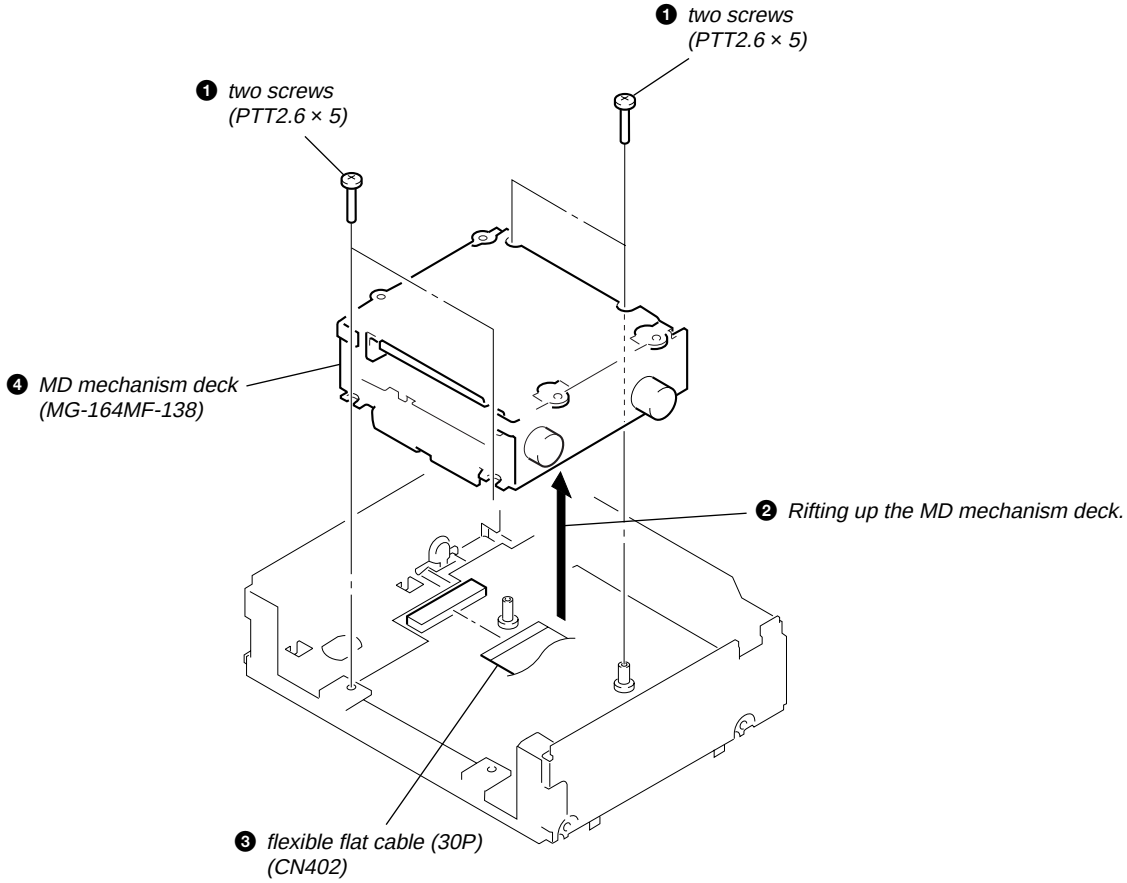

## 3-3. DISPLAY BOARD



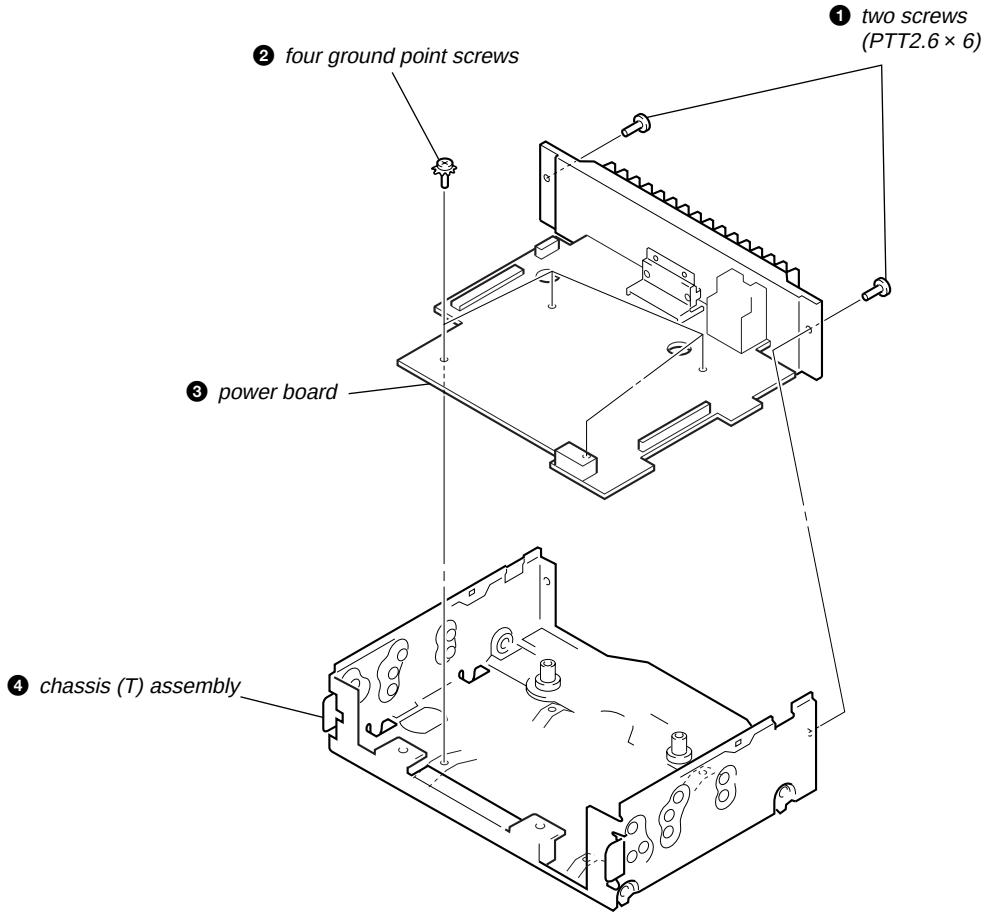
### 3-4. CHASSIS (T) SECTION



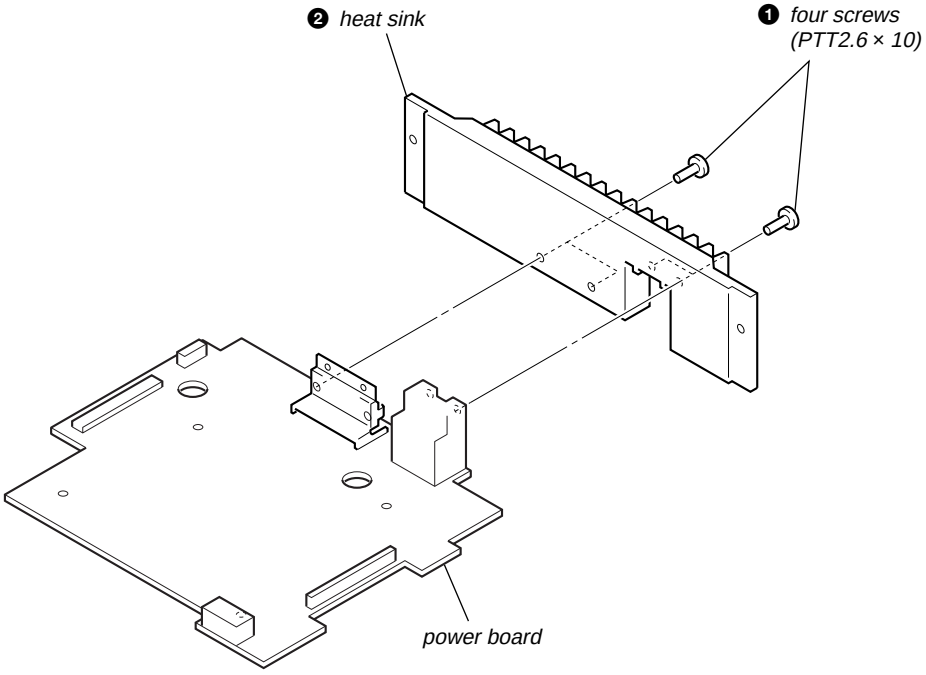

### 3-5. MD MECHANISM DECK (MG-164MF-138)



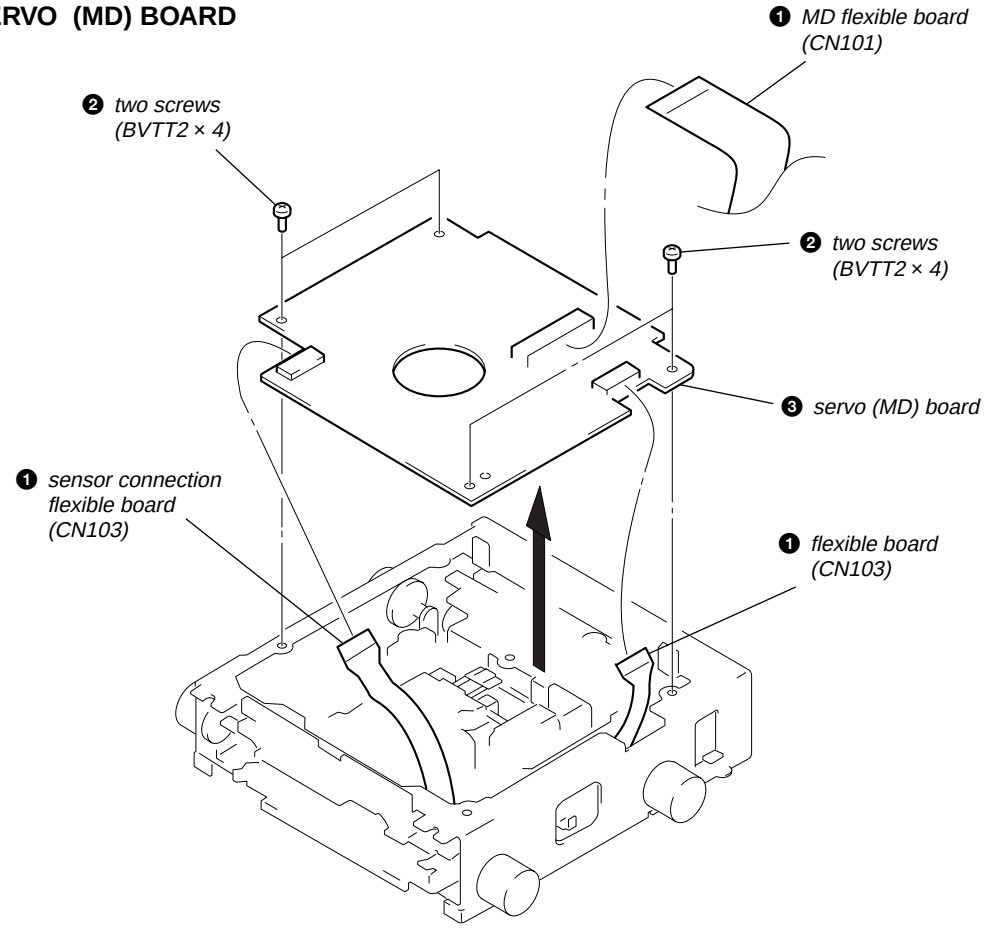
### 3-6. POWER BOARD, CHASSIS (T) ASSY



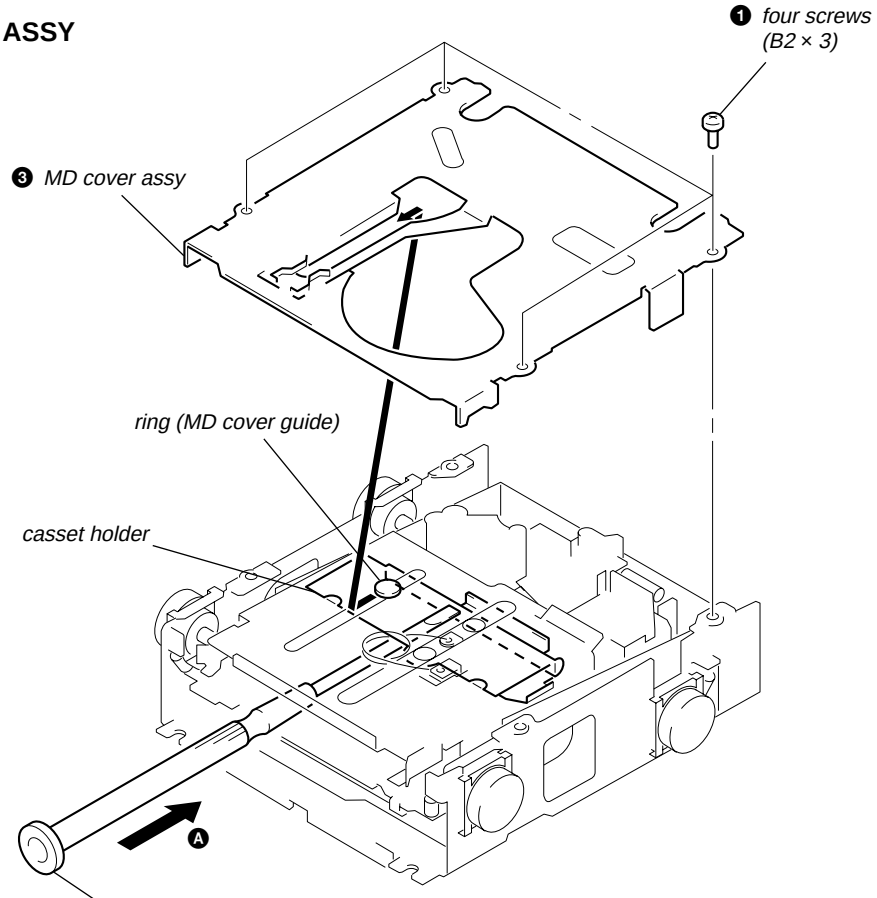

### 3-7. HEAT SINK



### 3-8. SERVO (MD) BOARD

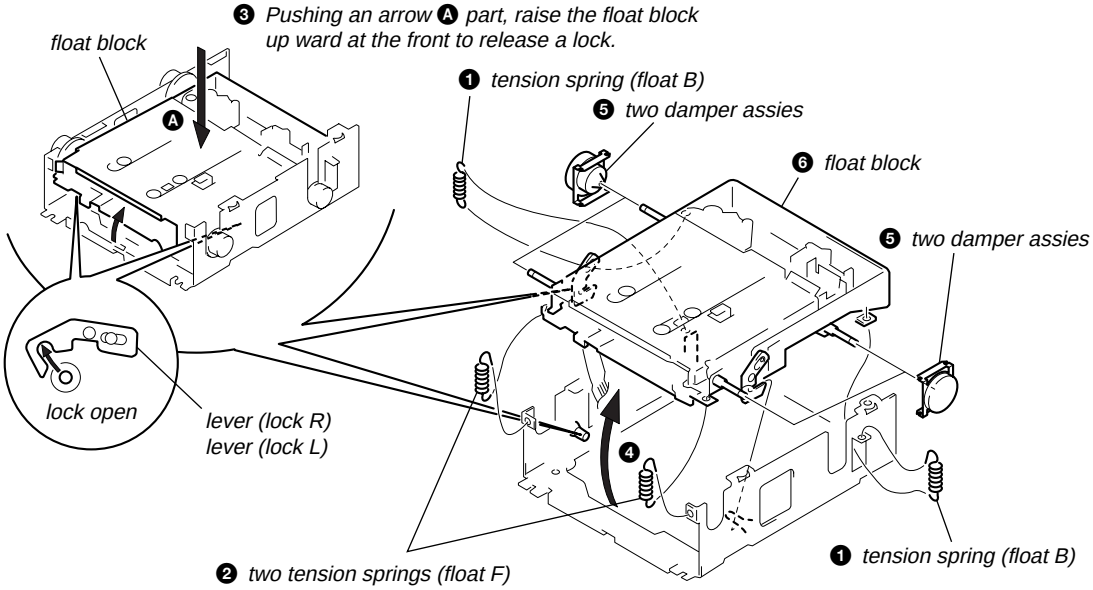



### 3-9. MD COVER ASSY

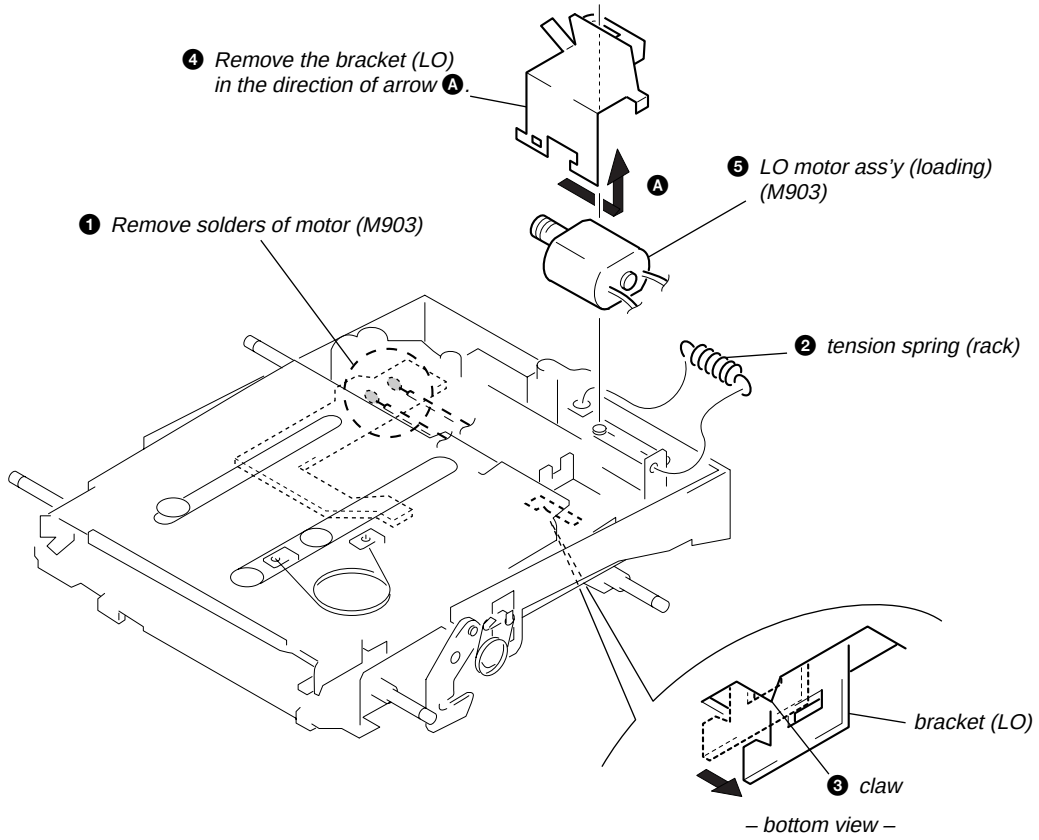



❷ *Pushing the cassette holder in the direction of arrow Ⓐ with a screwdriver, disengage the shaft (MD cover guide) from the groove of MD cover ass'y.*
*Note : Be careful not to damage the optical pick-up when pushing the cassette holder with a screwdriver.*

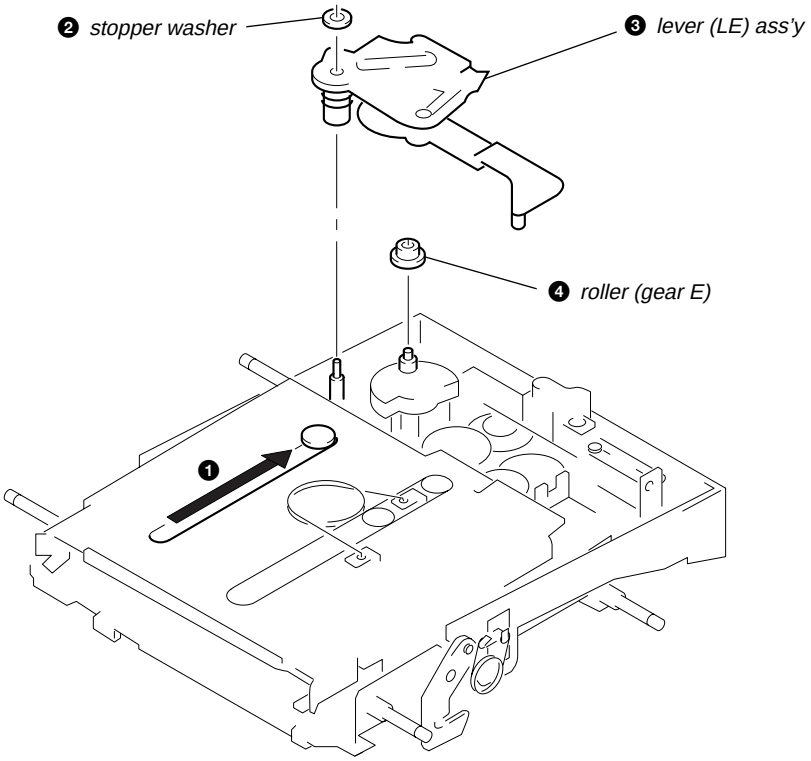
### 3-10. FLOAT BLOCK



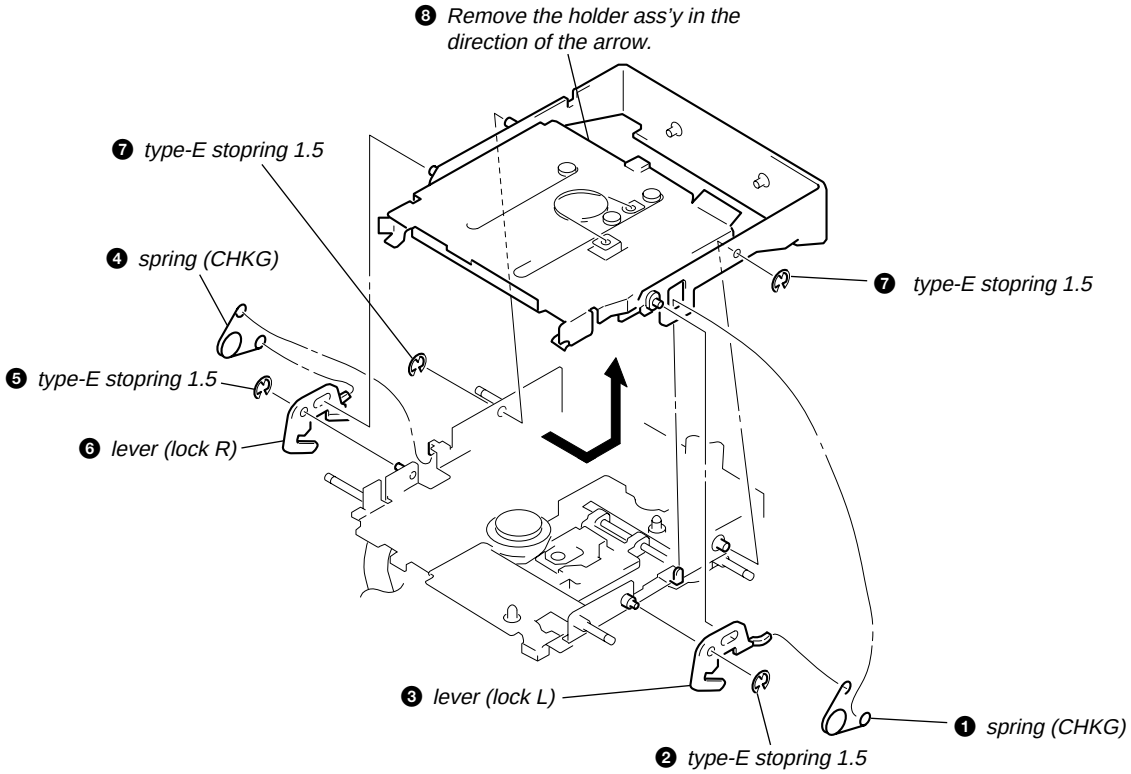

### 3-11. LO MOTOR ASSY



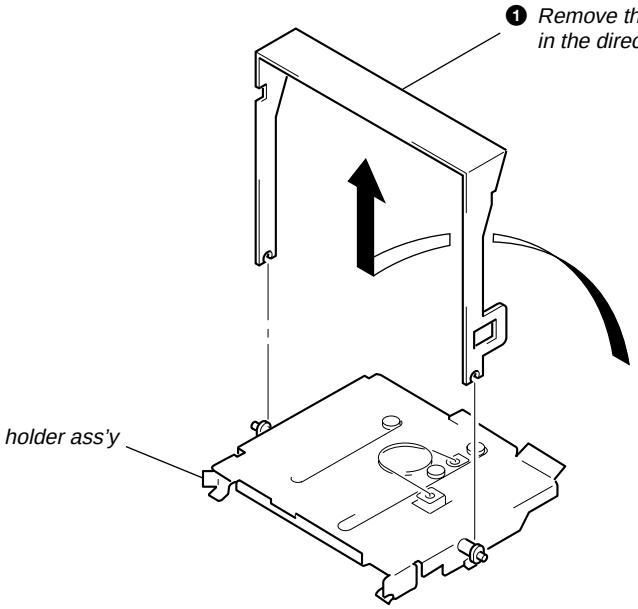
### 3-12. LEVER ASSY (LE)



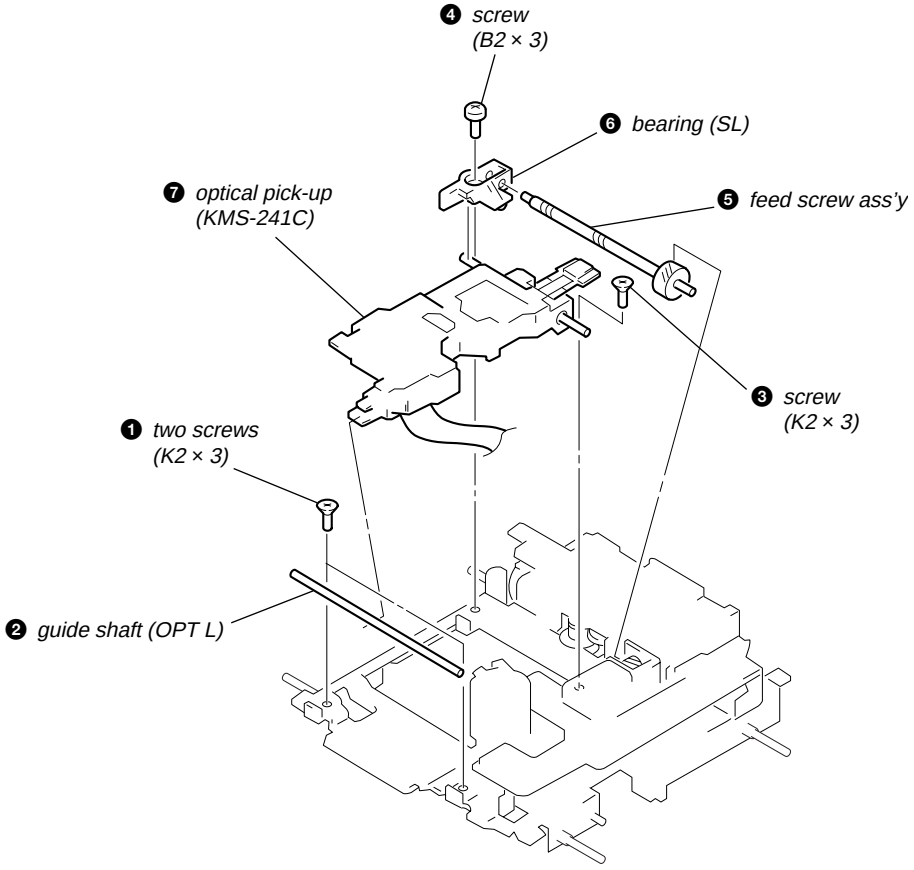

### 3-13. HOLDER ASSY



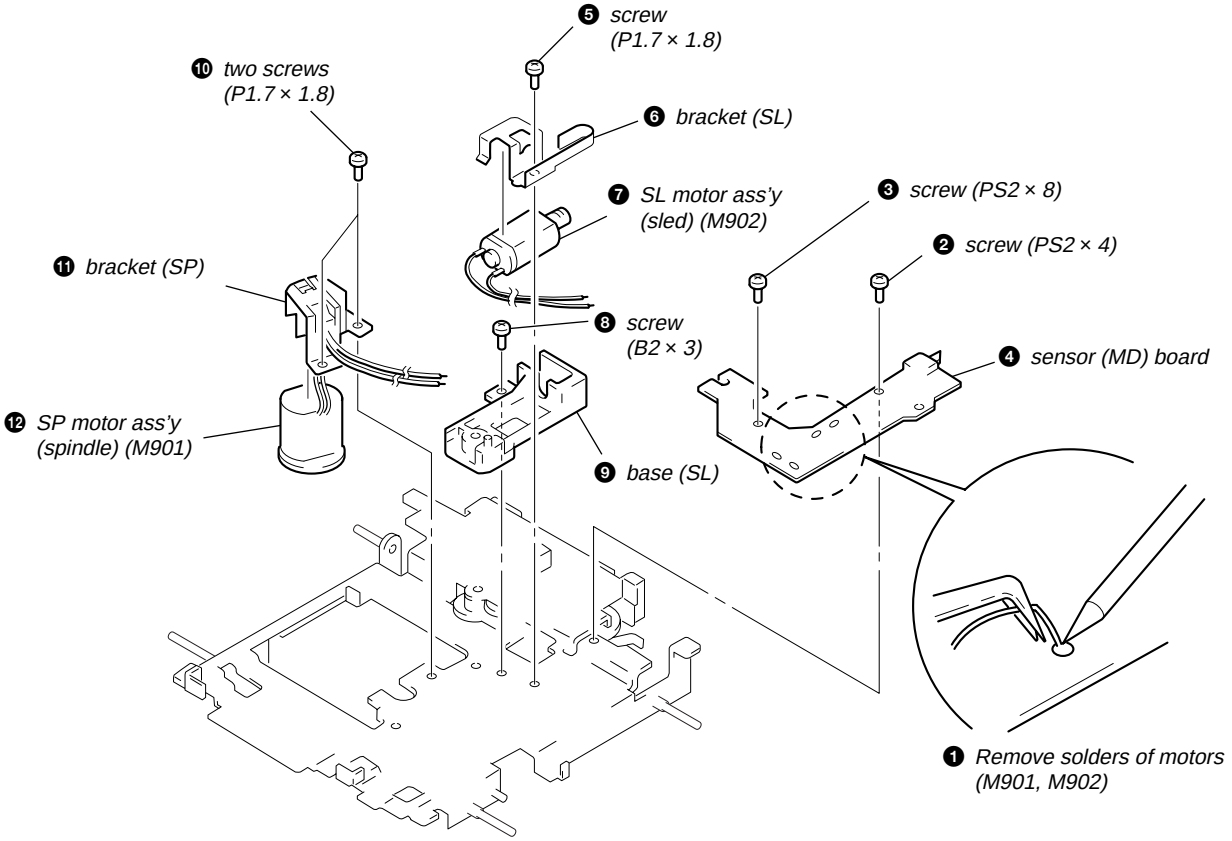
### 3-14. CHUCKING ARM ASSY



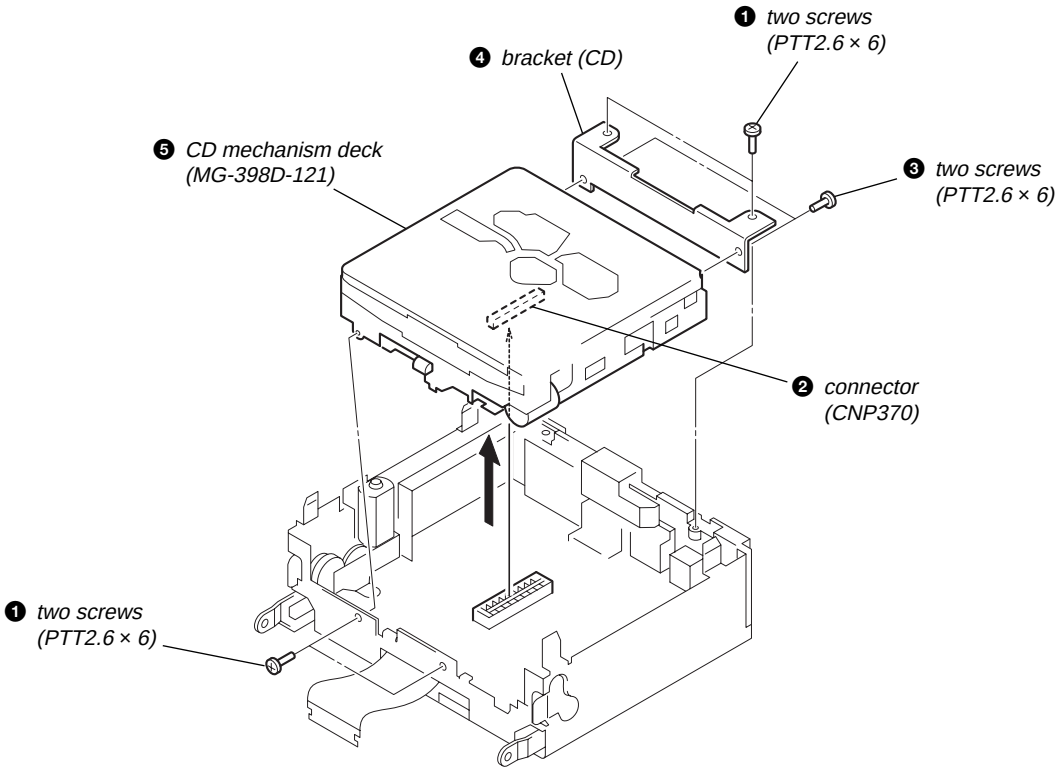

### 3-15. OPTICAL PICK-UP (KMS-241C)



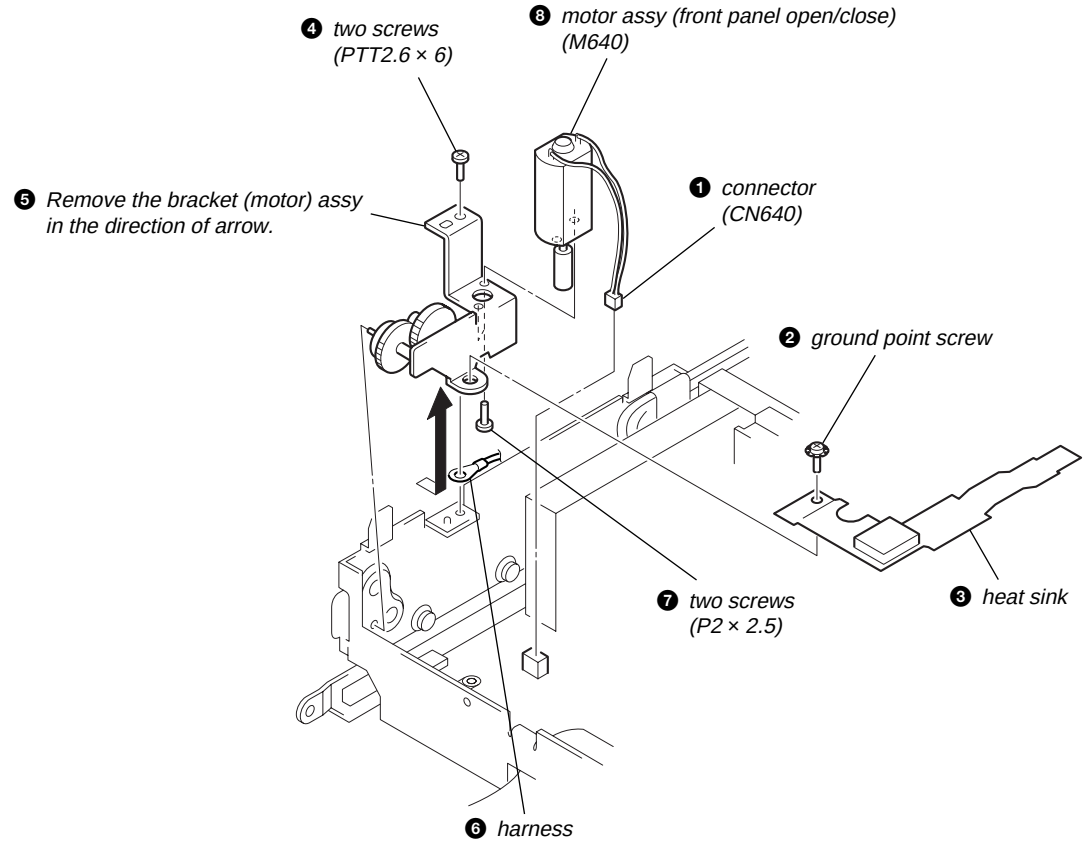
### 3-16. SL MOTOR ASSY (SLED) (M902)/SP MOTOR ASSY (SPINDLE) (M901)



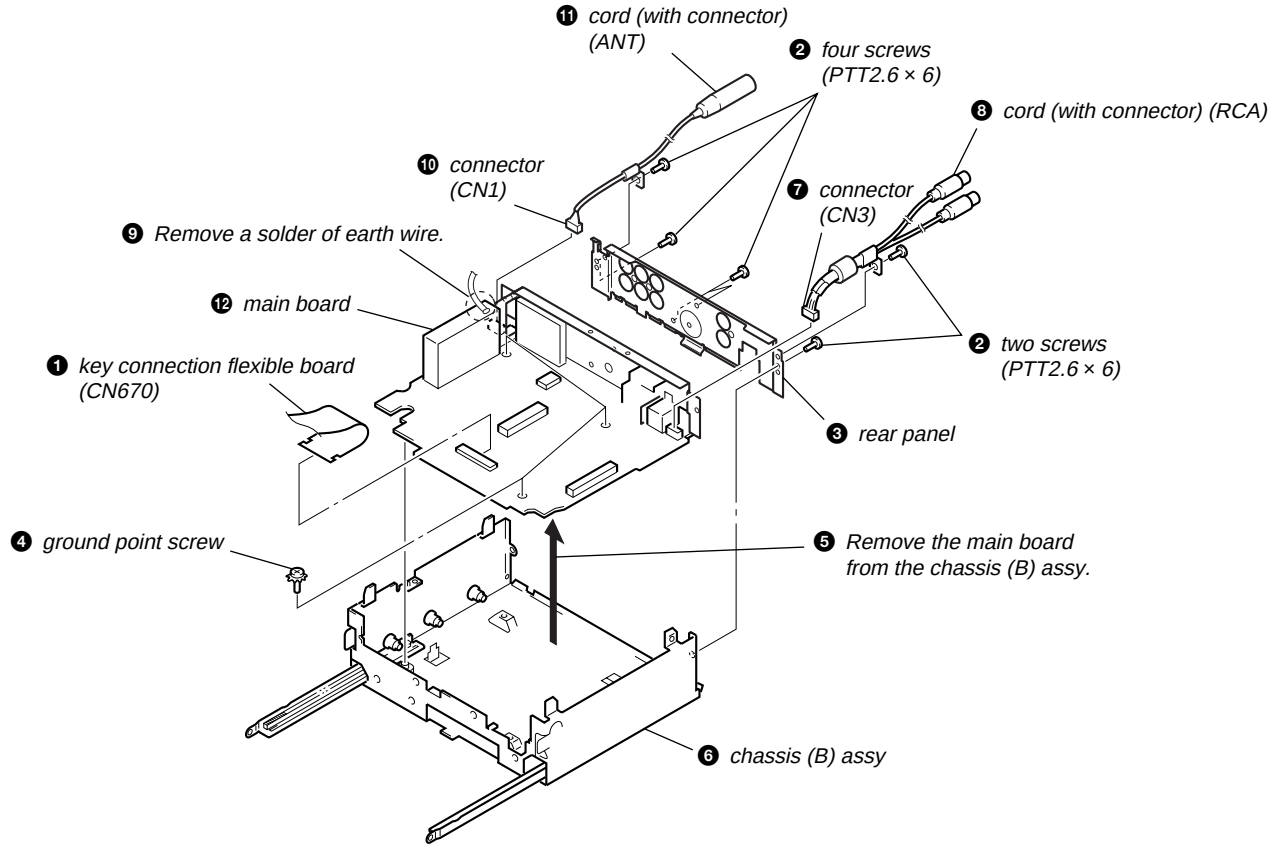

### 3-17. CD MECHANISM DECK (MG-398D-121)



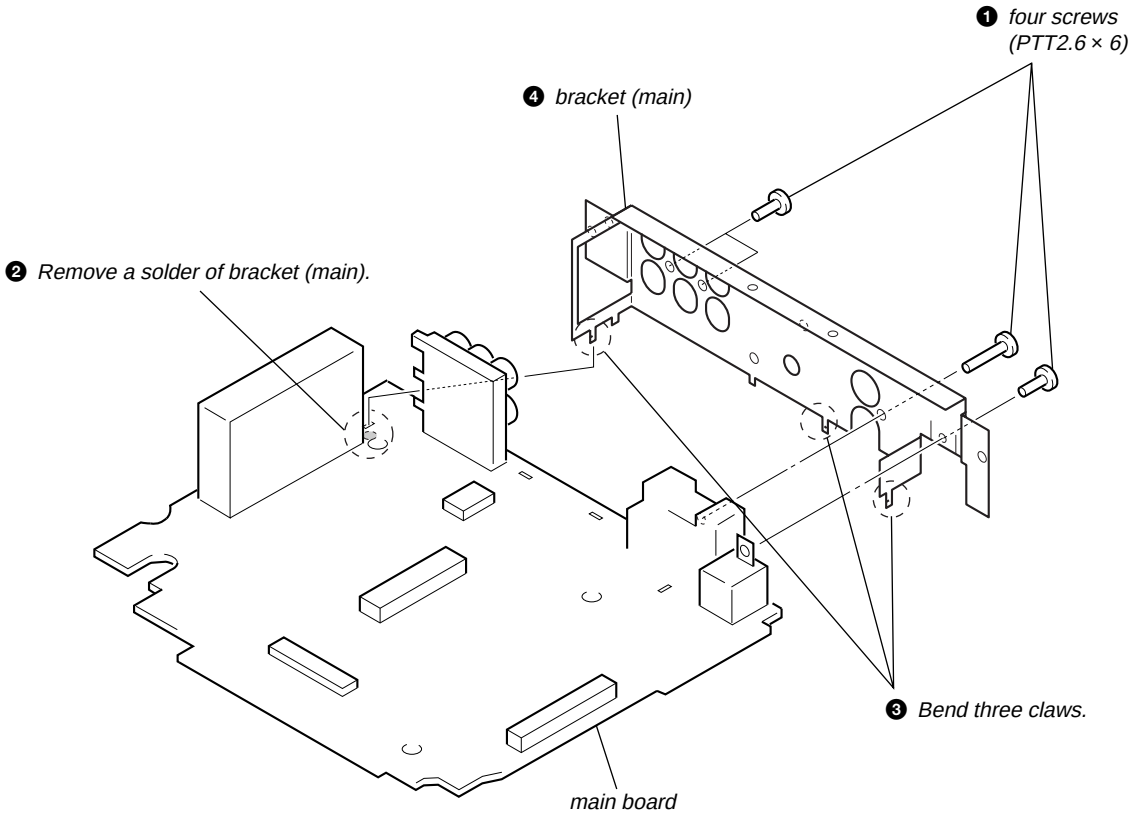
### 3-18. MOTOR ASSY (FRONT PANEL OPEN/CLOSE) (M640)



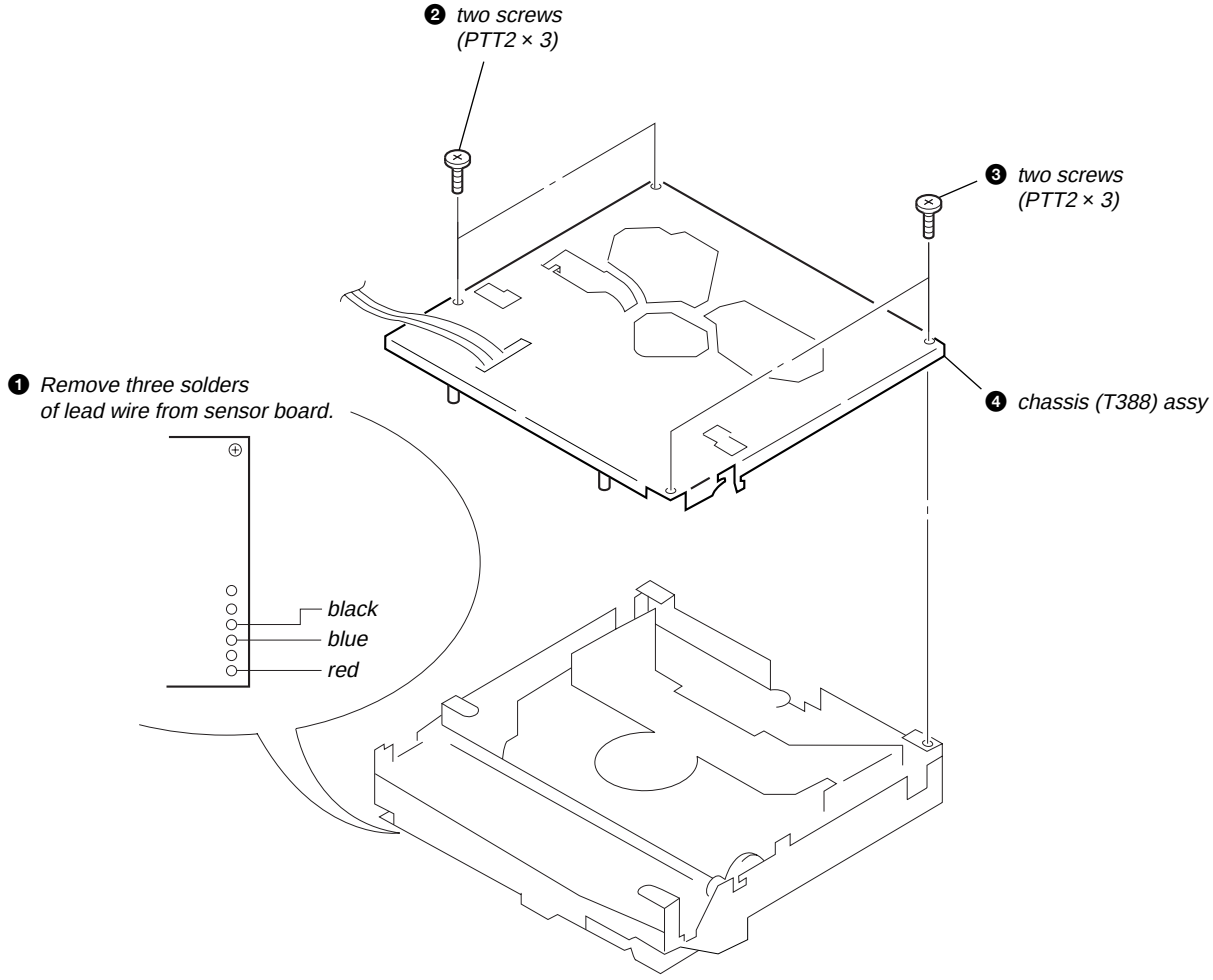

### 3-19. MAIN BOARD, CHASSIS (B) ASSY



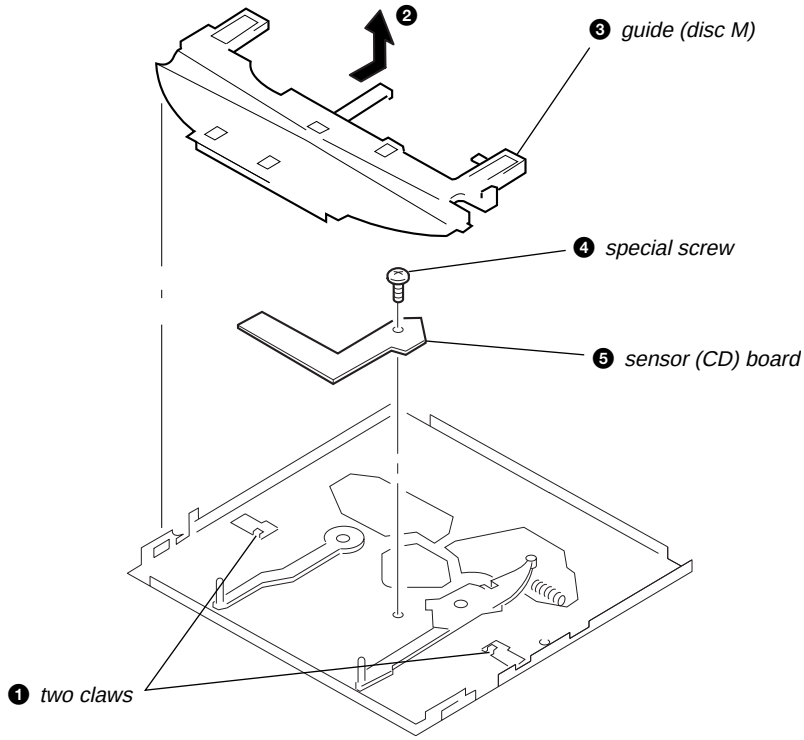
### 3-20. BRACKET (MAIN)



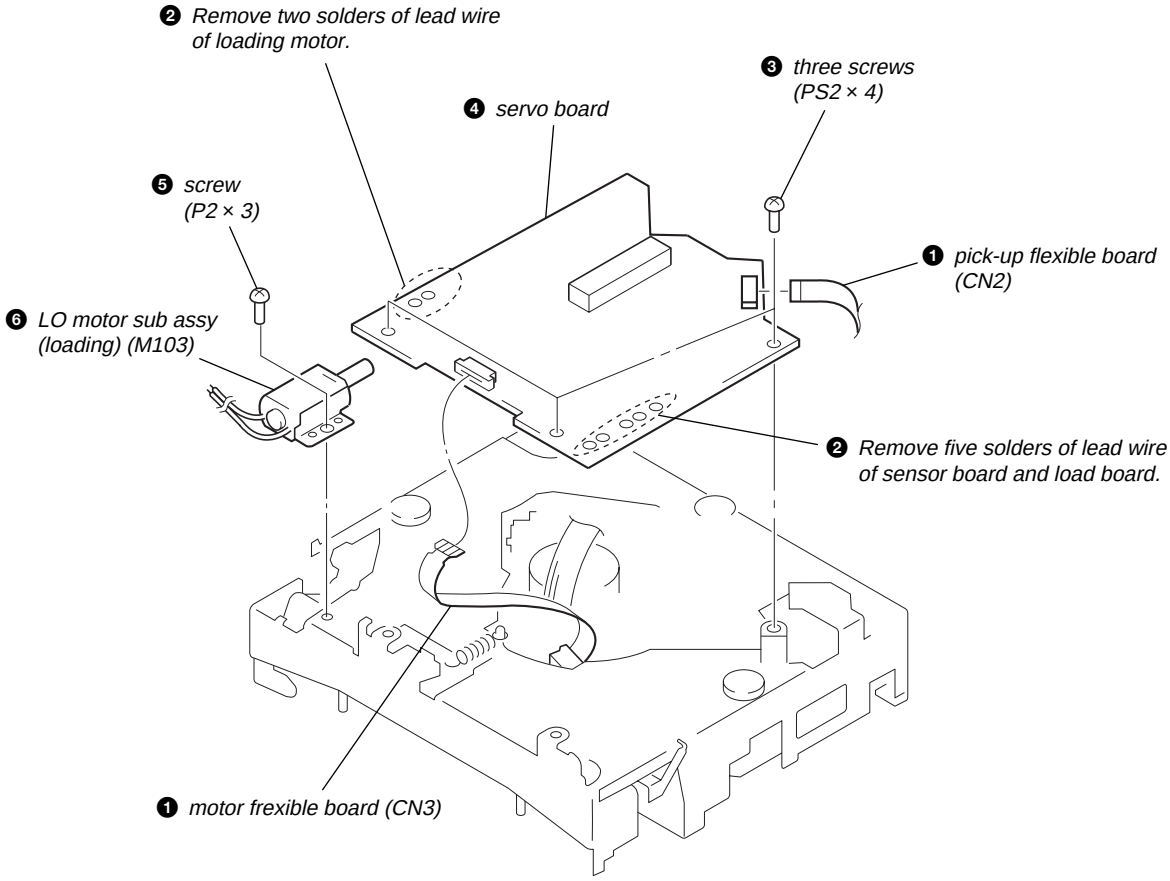

### 3-21. CHASSIS (T388) ASSY



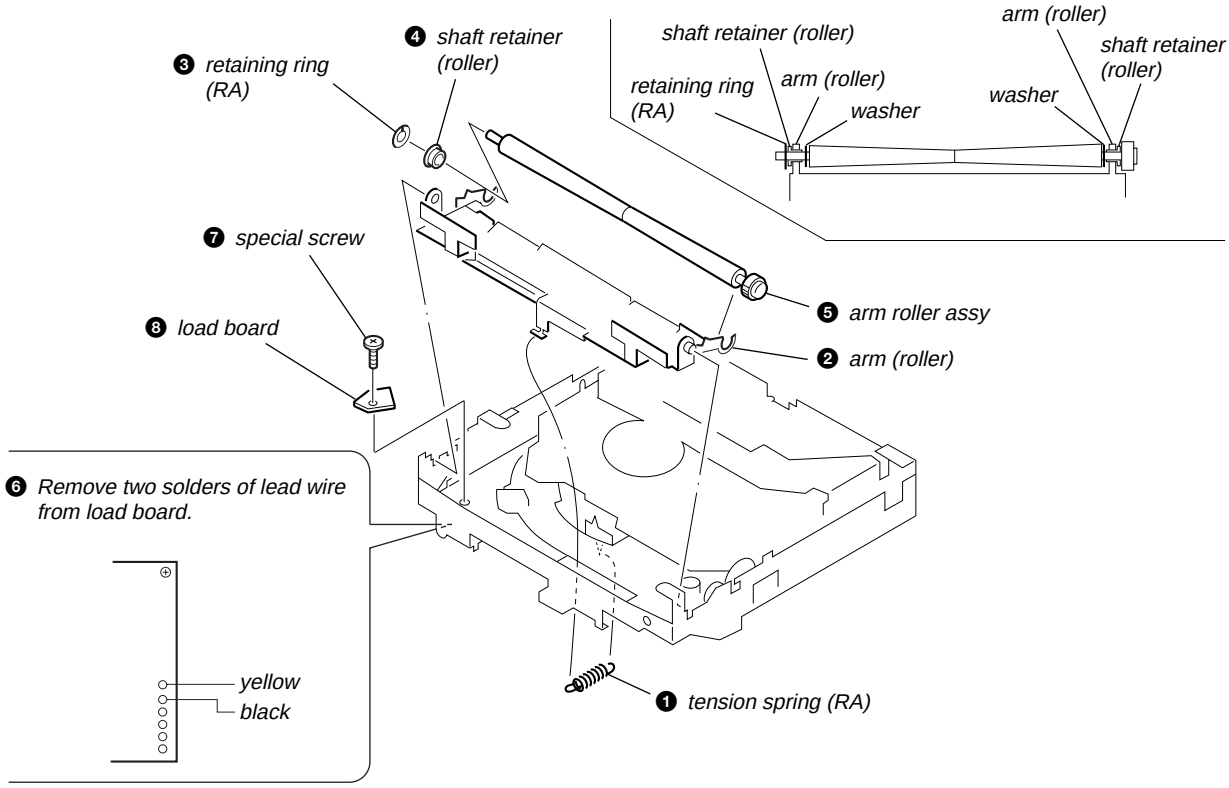
### 3-22. SENSOR (CD) BOARD



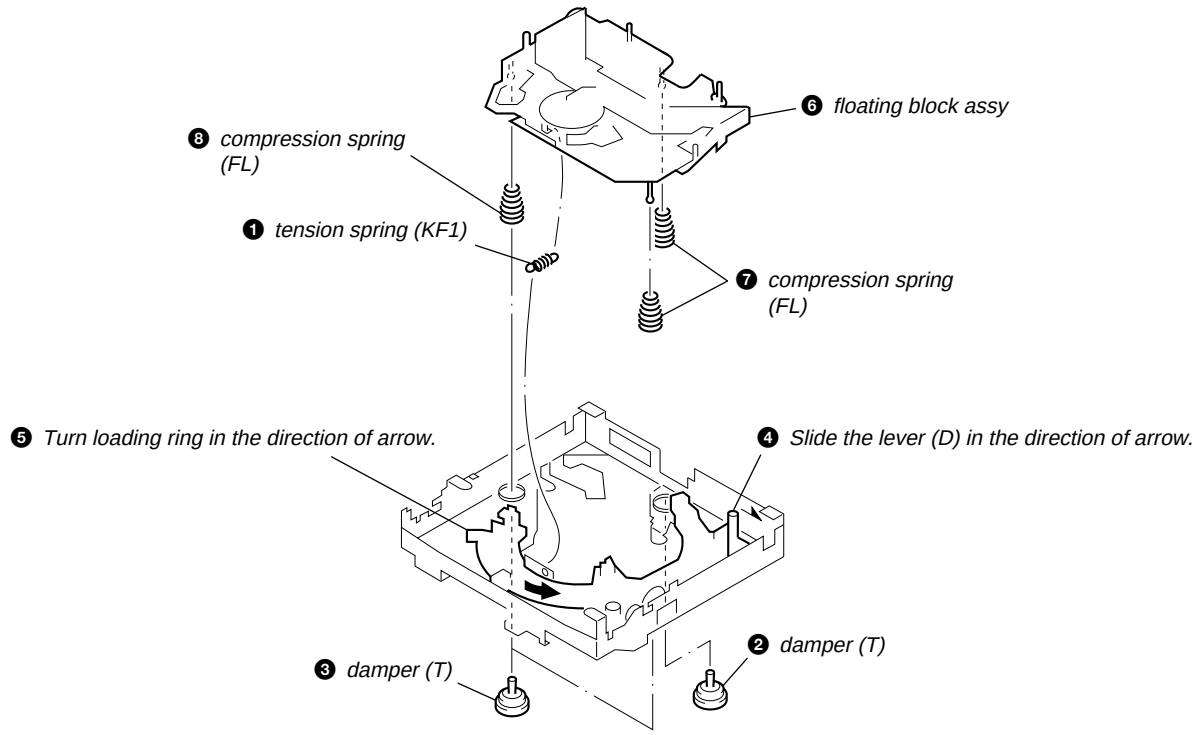

### 3-23. SERVO BOARD, LO MOTOR SUB ASSY (LOADING) (M103)



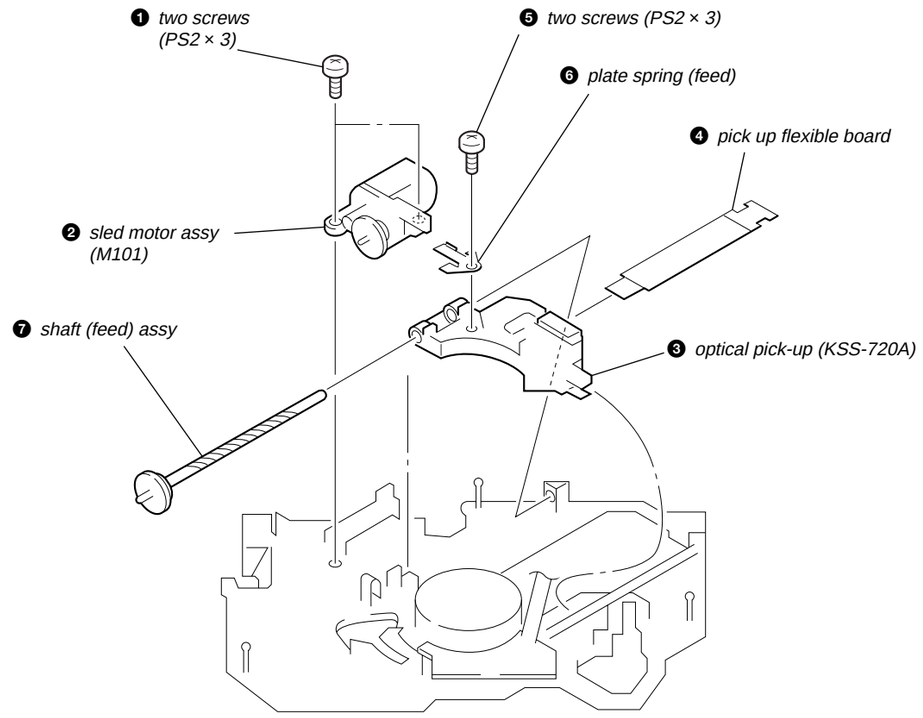
### 3-24. ARM ROLLER ASSY, LOAD BOARD




### 3-25. FLOATING BLOCK ASSY



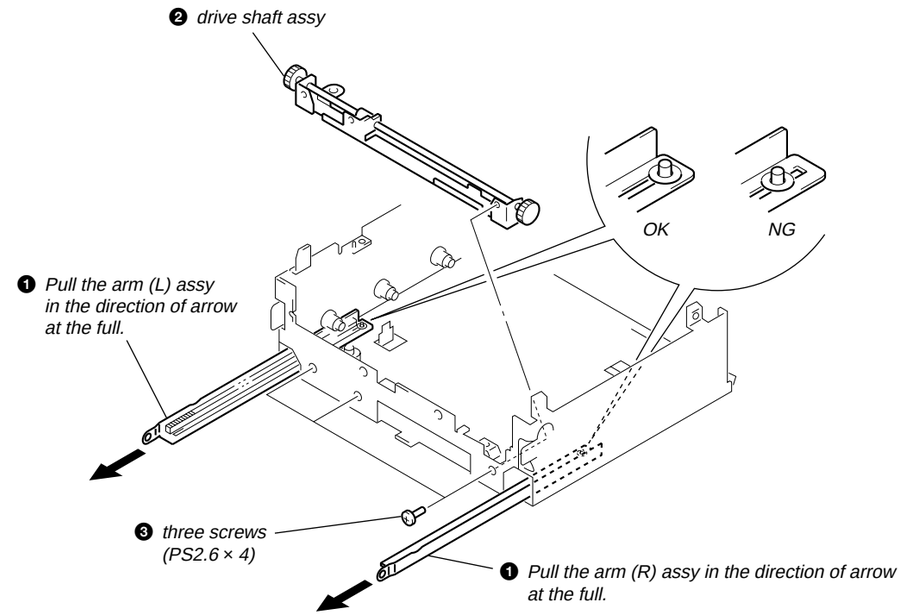
### 3-26. OPTICAL PICK-UP (KSS-720A), SLED MOTOR ASSY (M101)




## SECTION 4
## PHASE ALIGNMENT

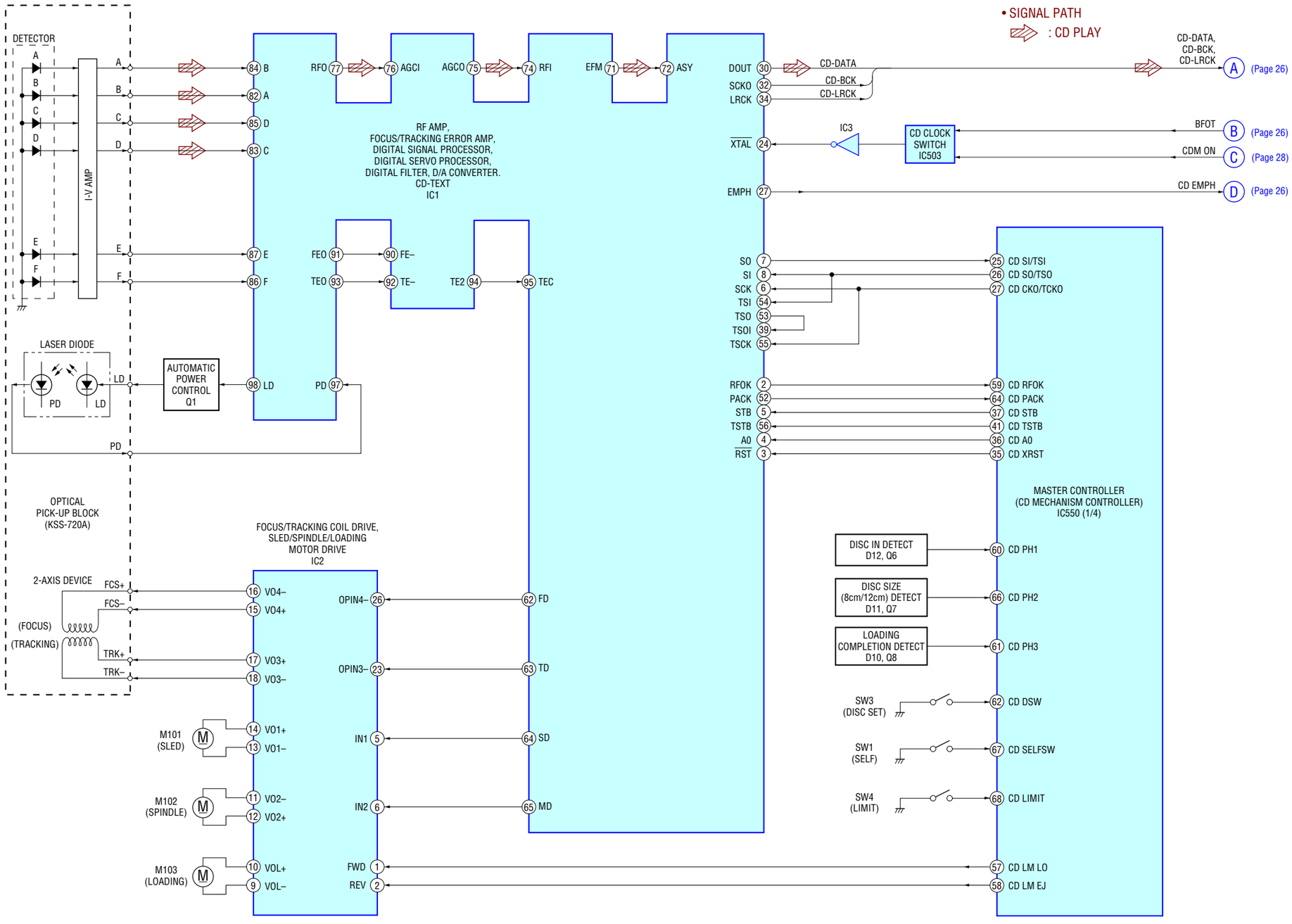
**Note:** Follow the assembly procedure in the numerical order given.

### 4-1. ASSEMBLY OF ARM (L/R) ASSY

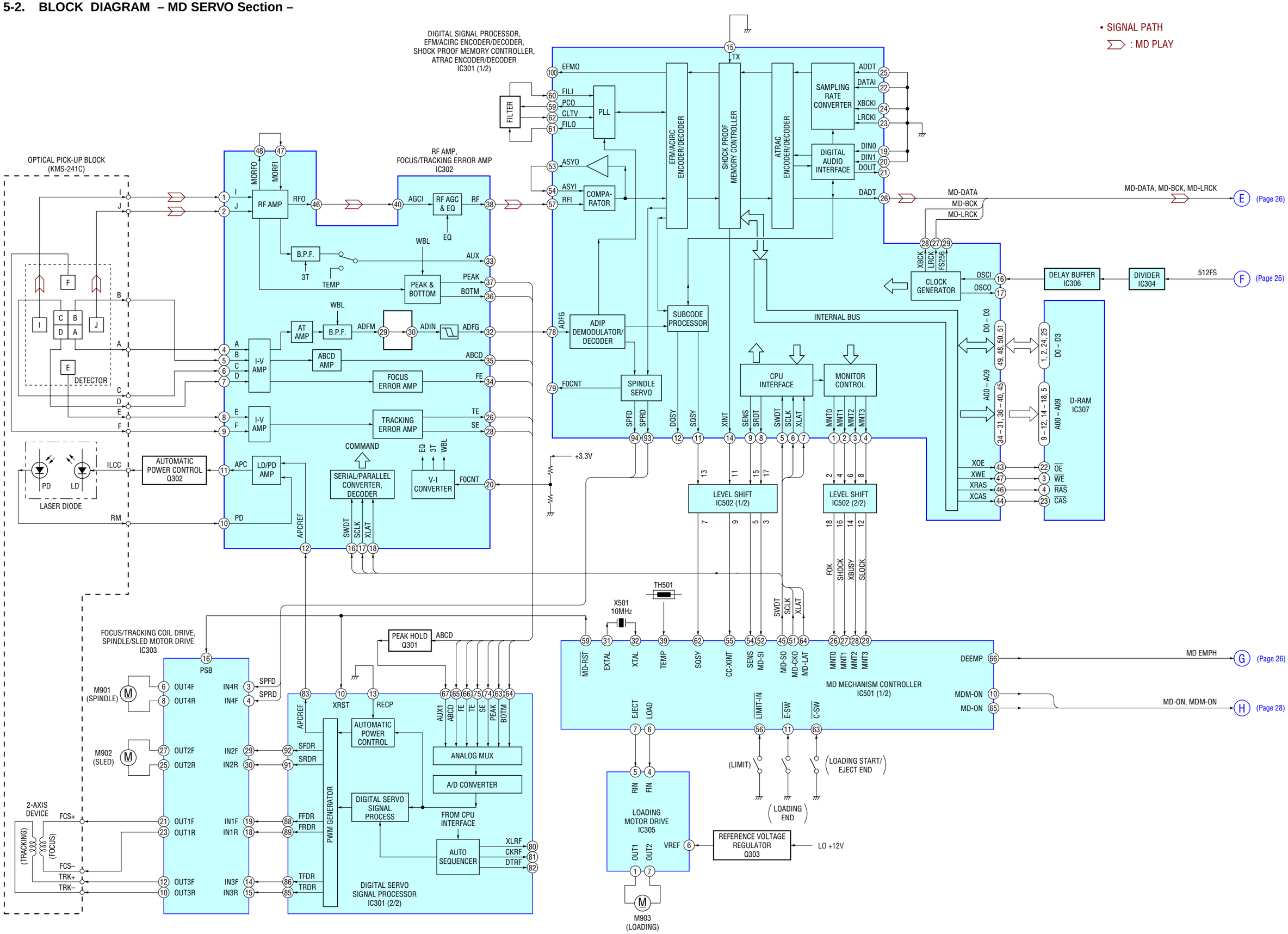


# SECTION 5
# DIAGRAMS

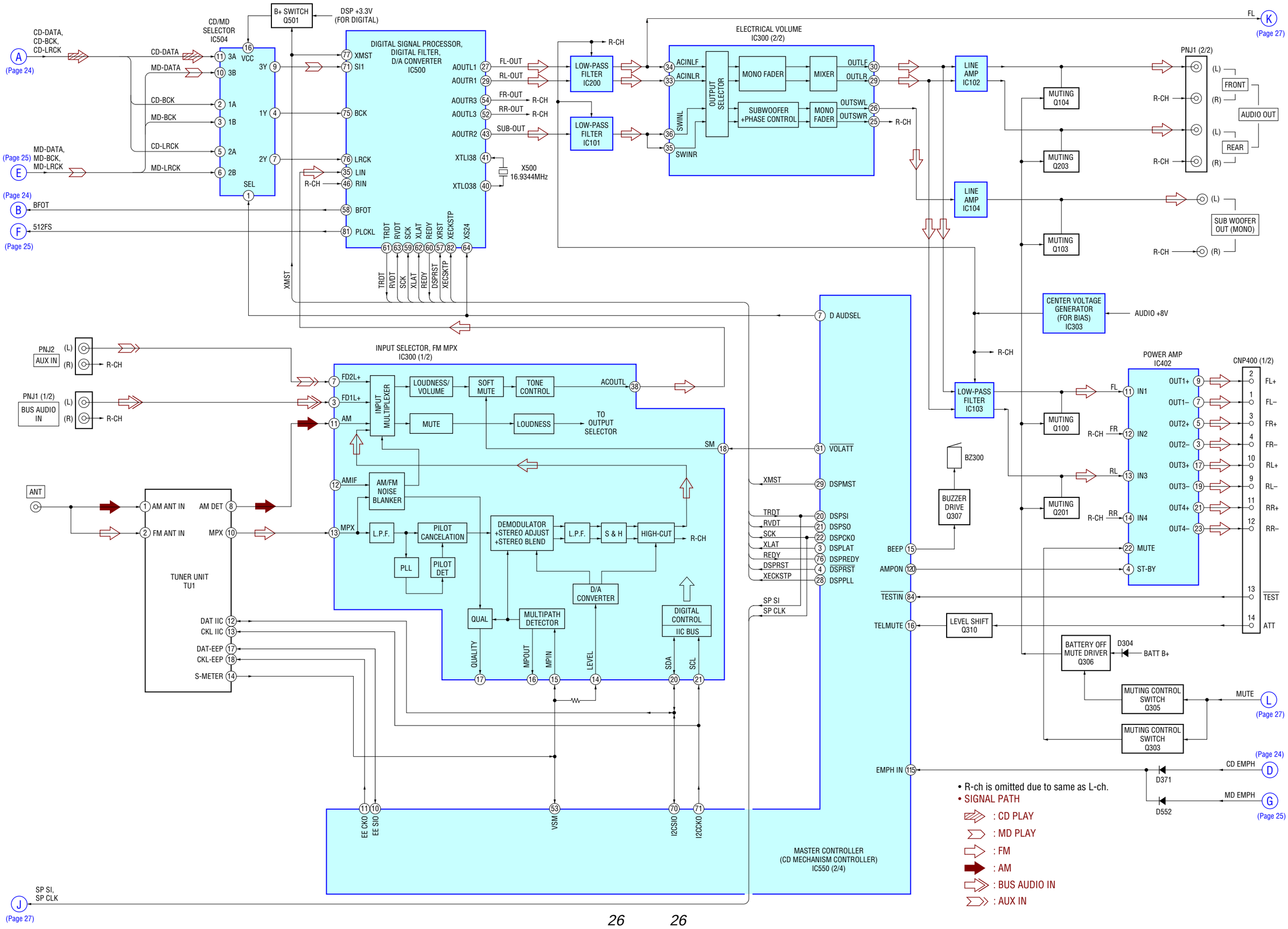
## 5-1. BLOCK DIAGRAM – CD SERVO Section –



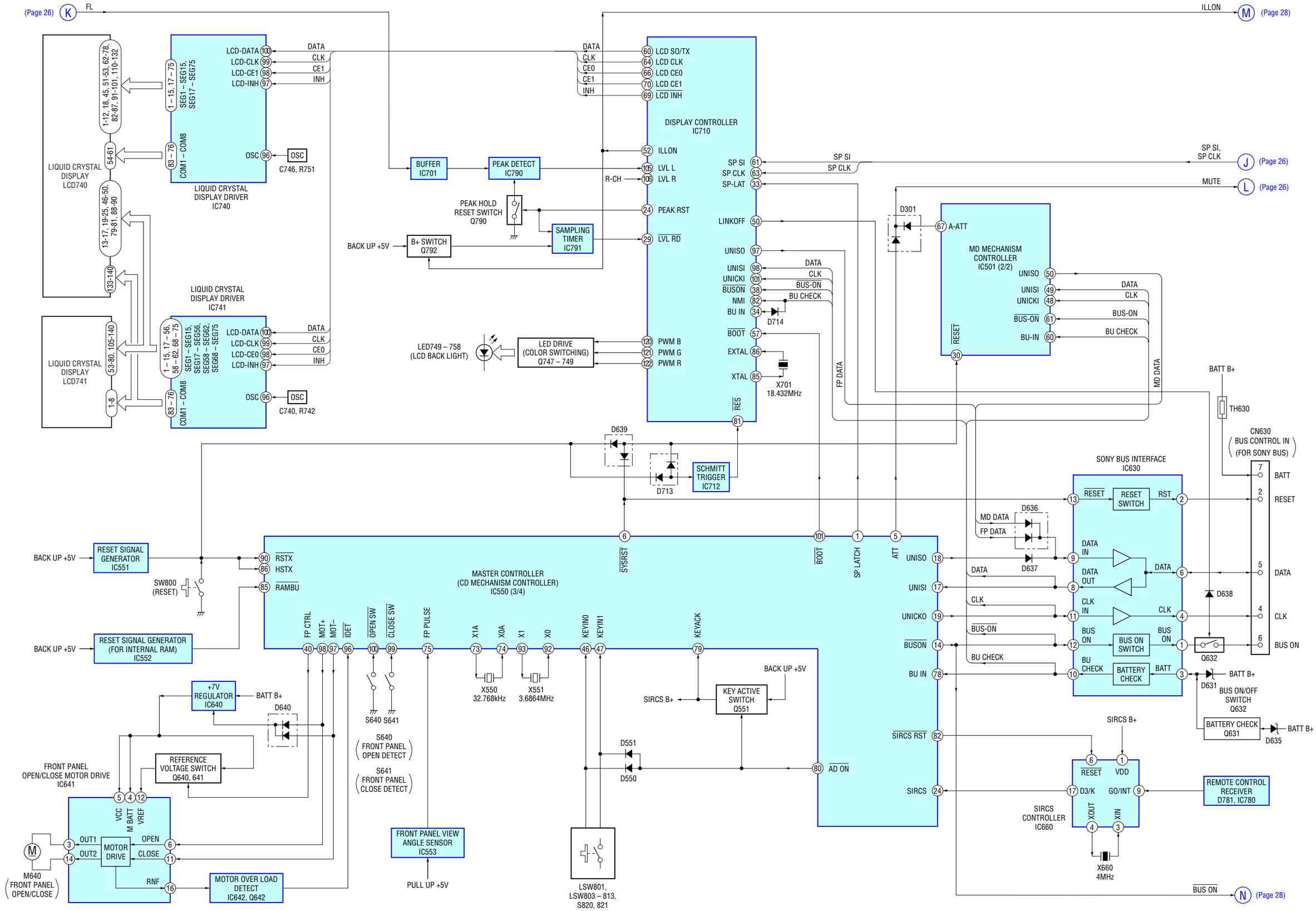
## 5-2. BLOCK DIAGRAM – MD SERVO Section –



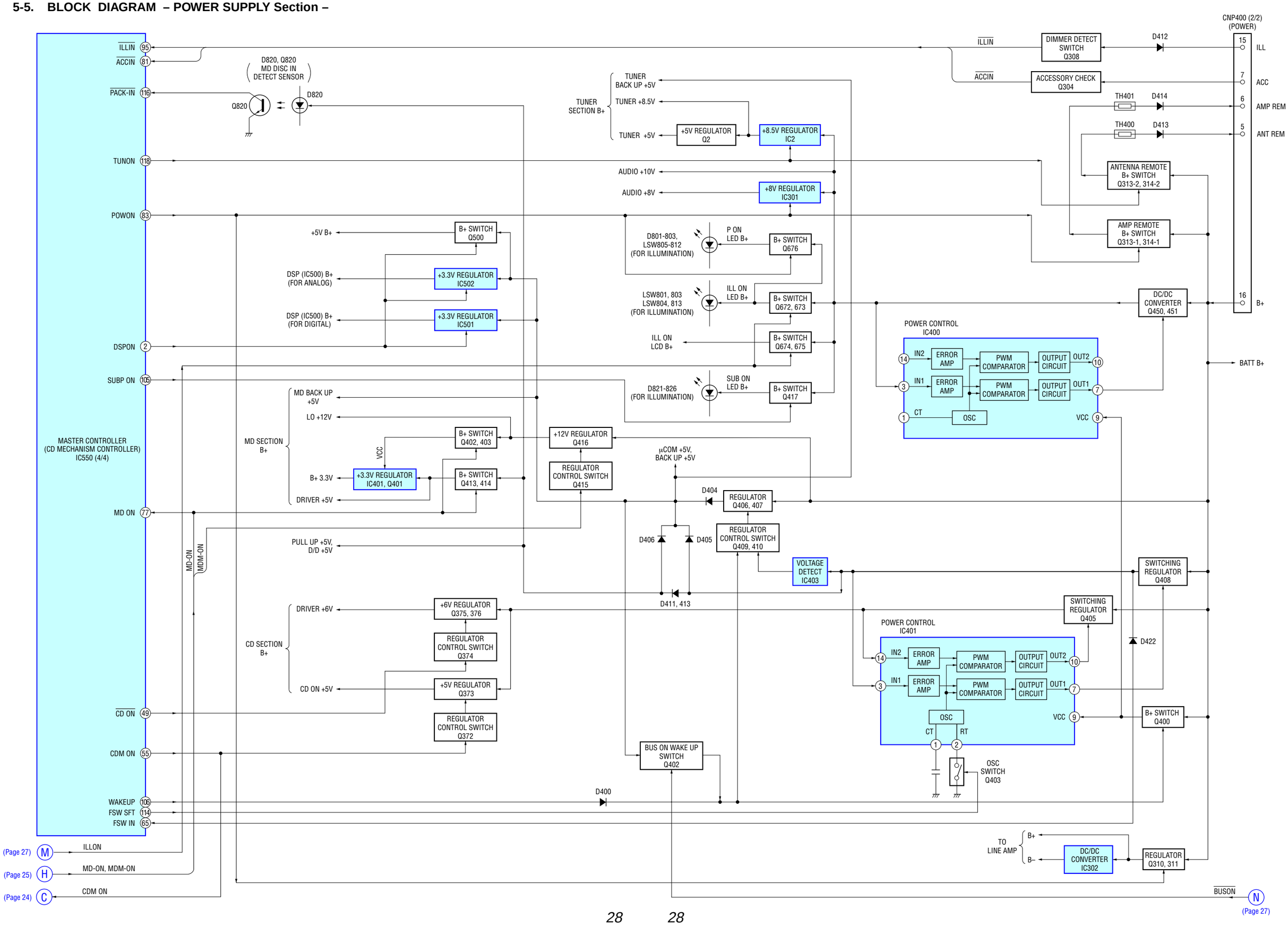
## 5-3. BLOCK DIAGRAM – MAIN Section –



## 5-4. BLOCK DIAGRAM – DISPLAY/BUS CONTROL Section –



## 5-5. BLOCK DIAGRAM – POWER SUPPLY Section –



## 5-6. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

**Note on Schematic Diagram:**

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

**Note:** The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  – SERVO (CD)/MAIN/DISPLAY/SUB/POWER Boards –
  no mark : FM
  ( ) : AM
  [ ] : CD PLAY
  ⟨⟨ ⟩⟩ : MD PLAY
  { } : Front panel open/close motor is operating
  ✻ : Impossible to measure
  – SERVO (MD) Board –
  no mark : MD PLAY
  ✻ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : AM
  ⇨ : CD PLAY
  ⇨ : MD PLAY
  ⇨ : BUS AUDIO IN
  ⇨ : AUX IN

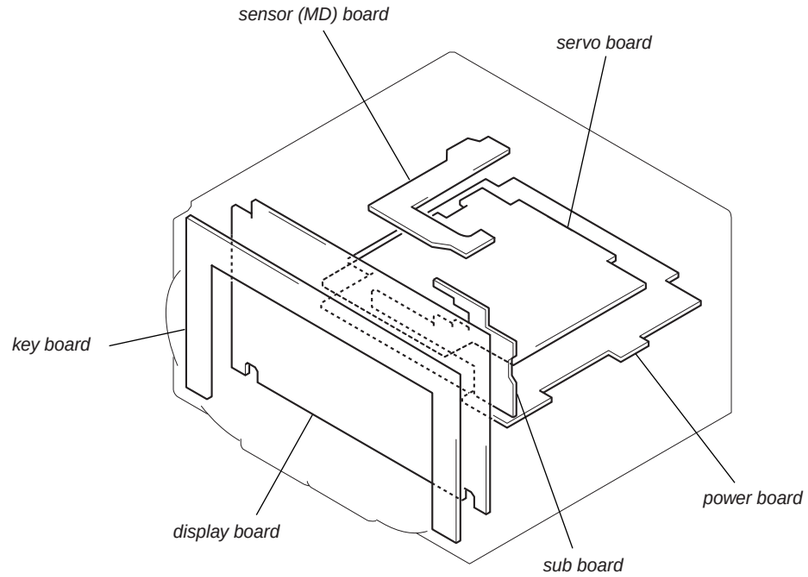
**Note on Printed Wiring Boards:**

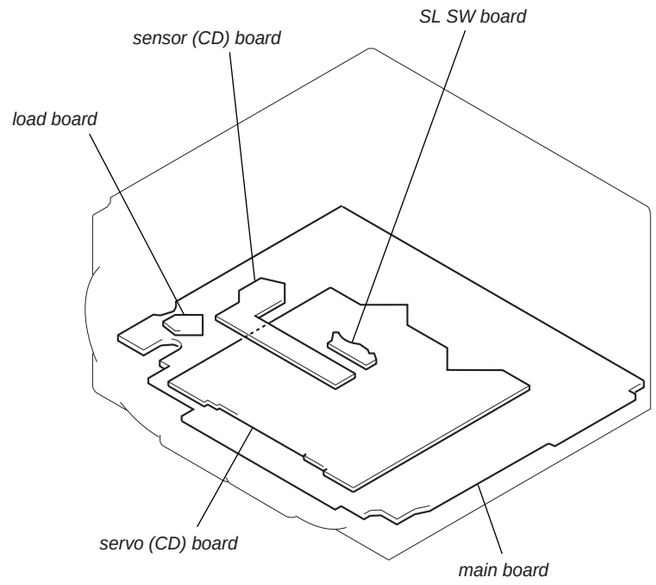
- o——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ● : Through hole.
- △ : internal component.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

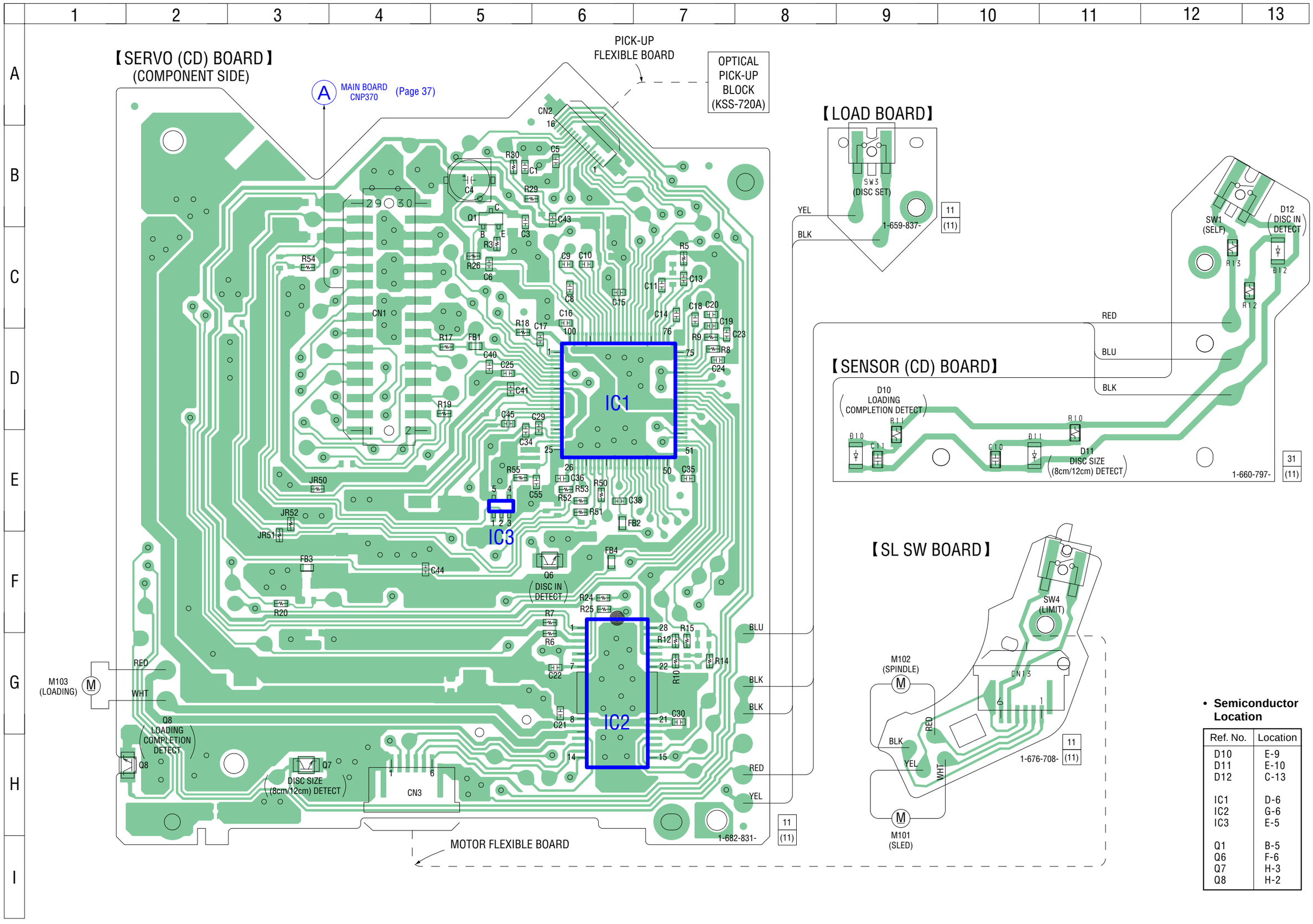
| Caution: | |
|---|---|
| Pattern face side: (Conductor Side) | Parts on the pattern face side seen from the pattern face are indicated. |
| Parts face side: (Component Side) | Parts on the parts face side seen from the parts face are indicated. |

**• Circuit Boards Location**



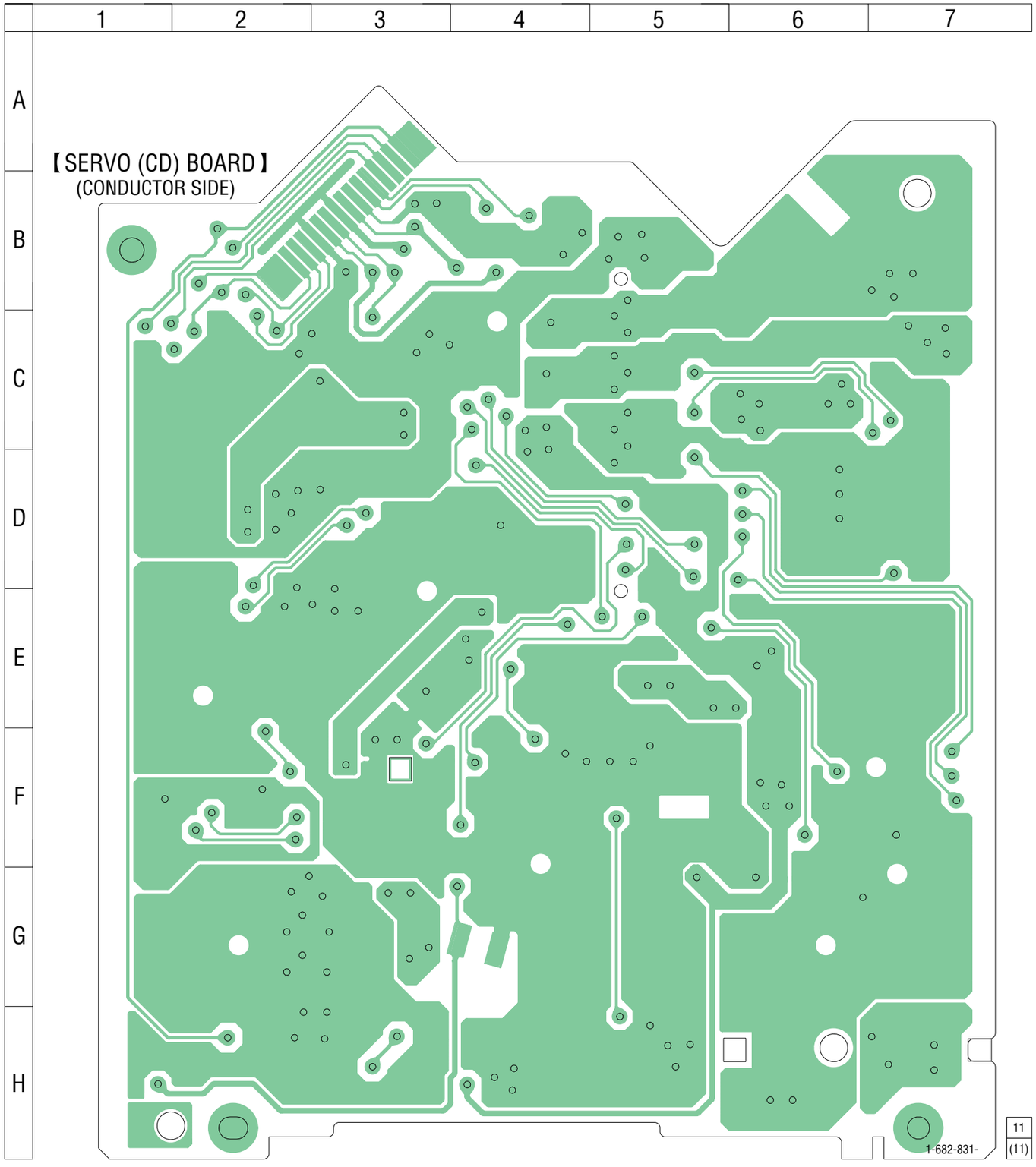
## 5-7. PRINTED WIRING BOARDS – CD Section (1/2) – • See page 29 for Circuit Boards Location.



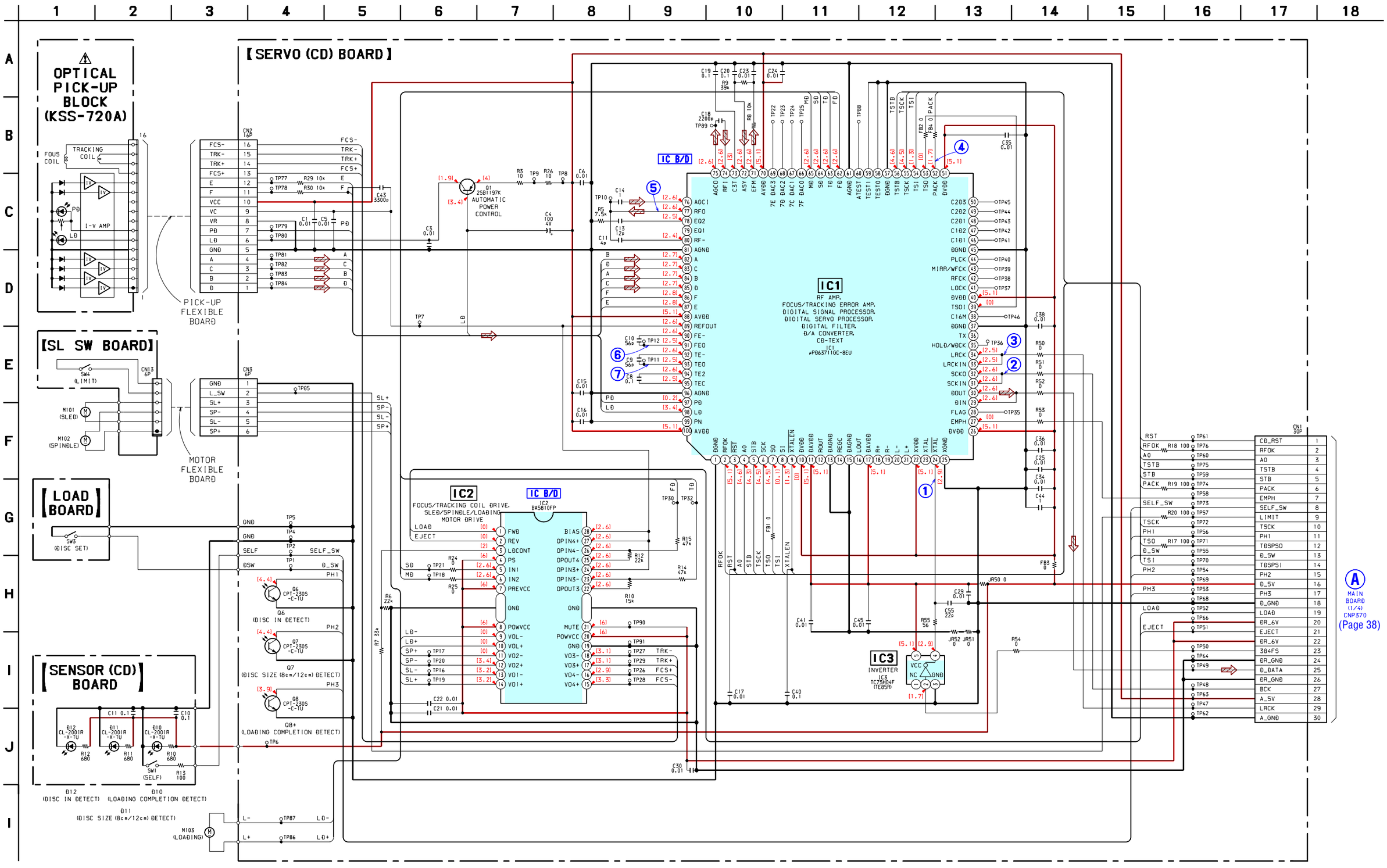

- **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D10 | E-9 |
| D11 | E-10 |
| D12 | C-13 |
| IC1 | D-6 |
| IC2 | G-6 |
| IC3 | E-5 |
| Q1 | B-5 |
| Q6 | F-6 |
| Q7 | H-3 |
| Q8 | H-2 |

## 5-8. PRINTED WIRING BOARD – CD Section (2/2) – • See page 29 for Circuit Boards Location.



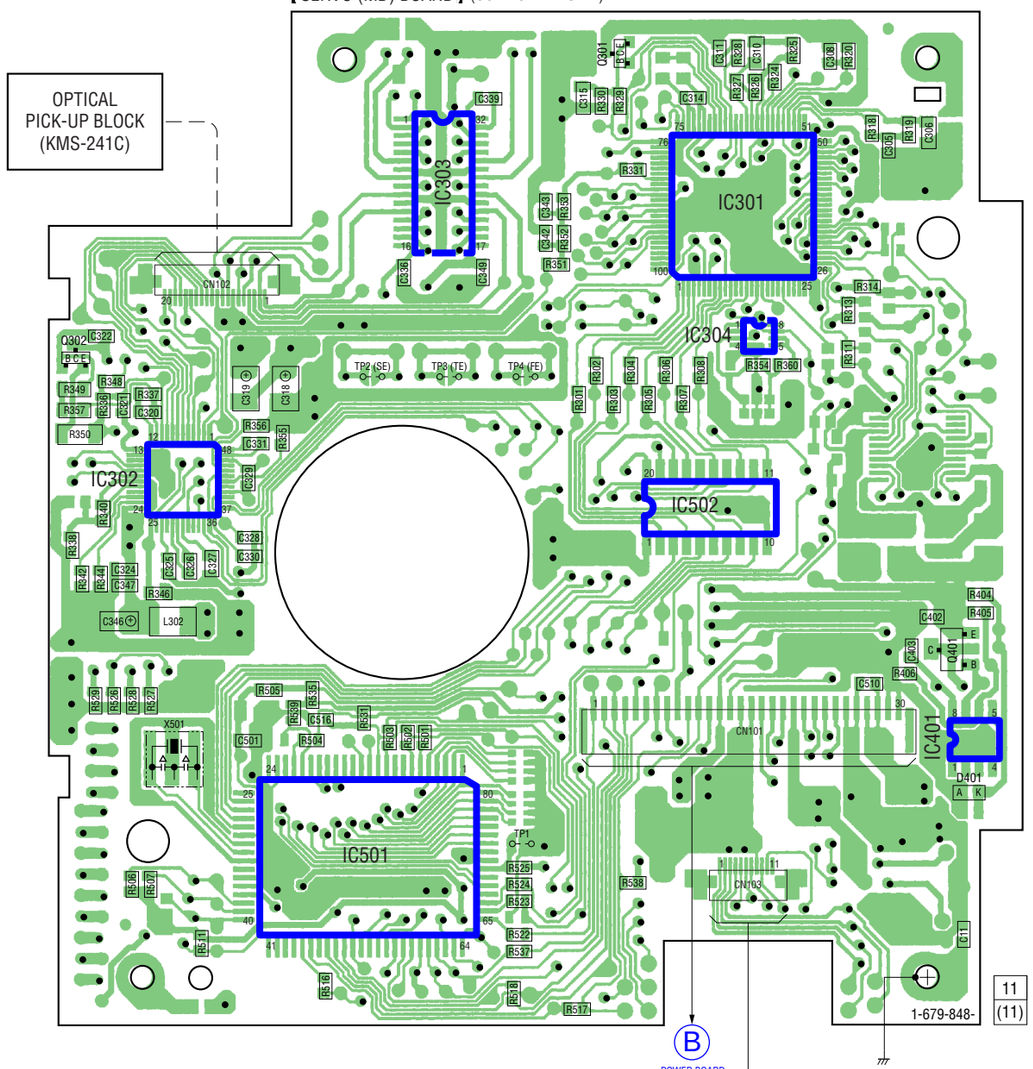
## 5-9. SCHEMATIC DIAGRAM – CD Section – • See page 52 for Waveforms. • See page 55 for IC Block Diagram.



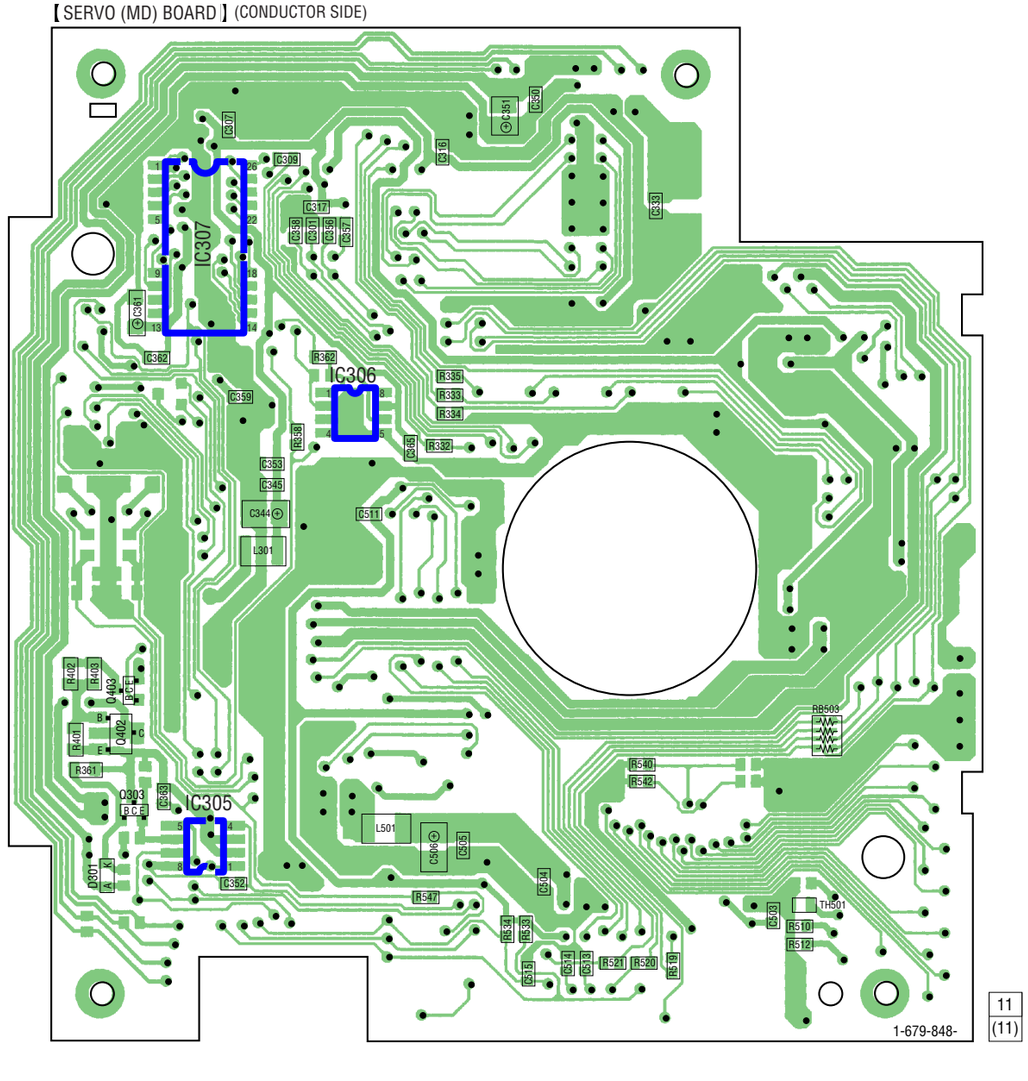

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

## 5-10. PRINTED WIRING BOARDS – MD Section – • See page 29 for Circuit Boards Location.

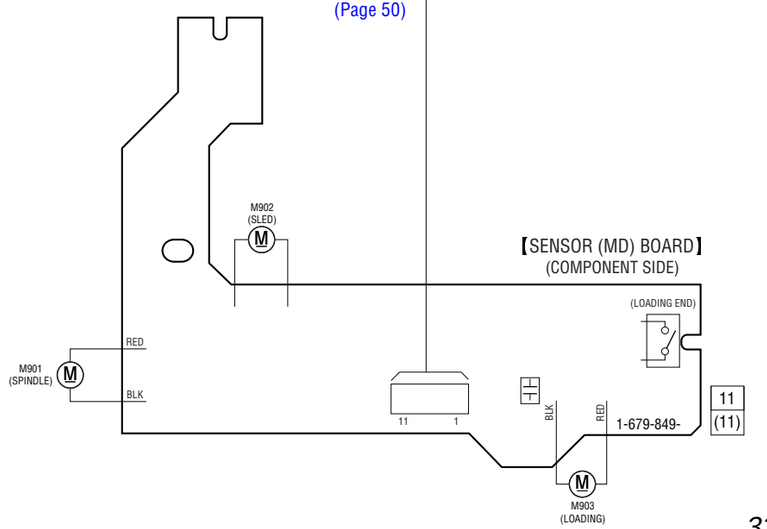
【SERVO (MD) BOARD】(COMPONENT SIDE)



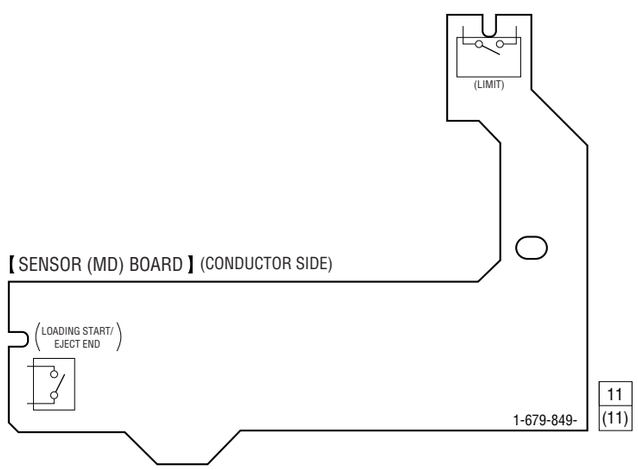

【SERVO (MD) BOARD】(CONDUCTOR SIDE)




【SENSOR (MD) BOARD】(COMPONENT SIDE)




【SENSOR (MD) BOARD】(CONDUCTOR SIDE)

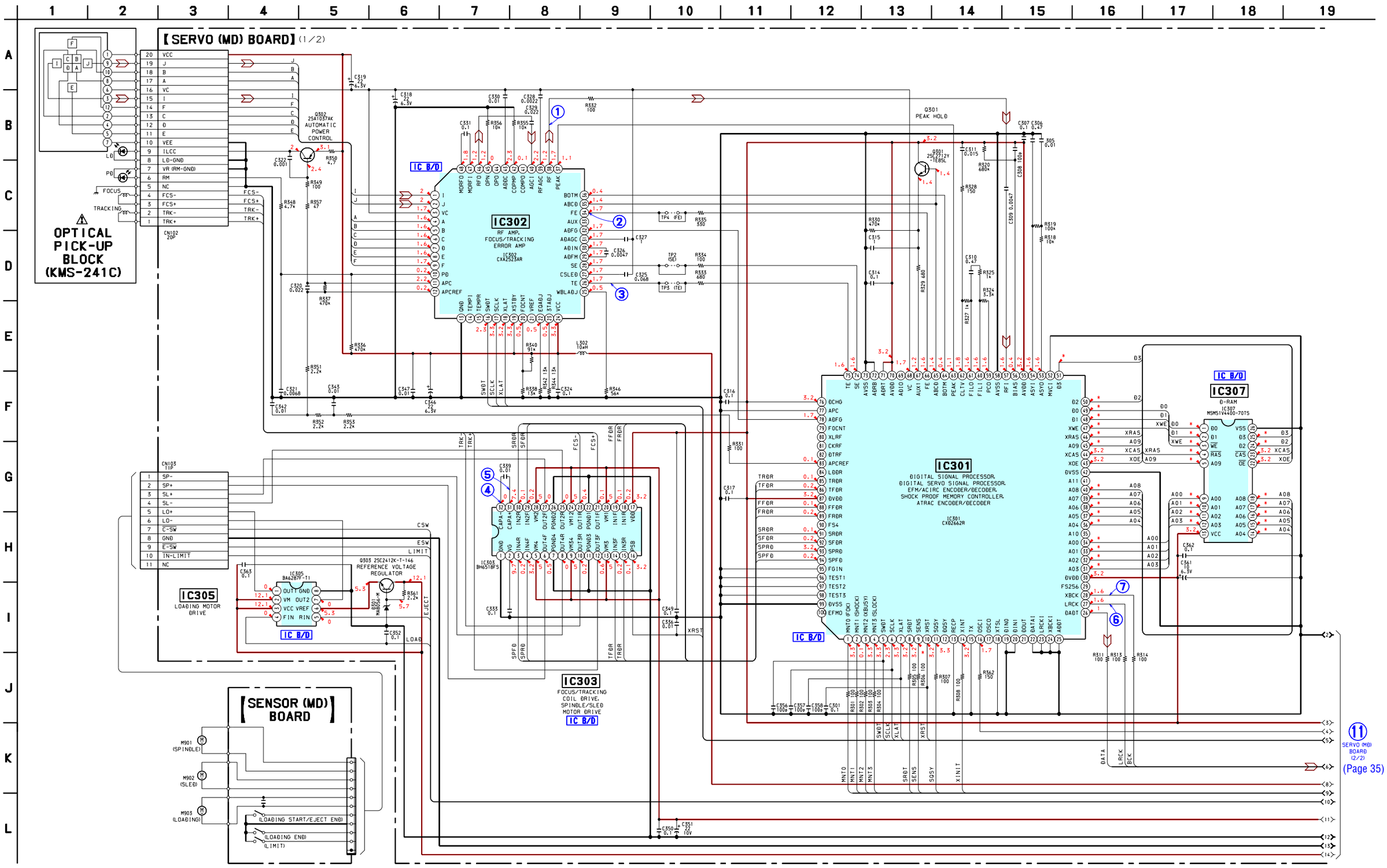



- **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D301 | G-9 |
| D401 | F-7 |
| IC301 | B-6 |
| IC302 | D-2 |
| IC303 | B-4 |
| IC304 | C-6 |
| IC305 | G-10 |
| IC306 | D-11 |
| IC307 | B-10 |
| IC401 | F-7 |
| IC501 | G-3 |
| IC502 | D-6 |
| Q301 | A-5 |
| Q302 | C-1 |
| Q303 | F-9 |
| Q401 | E-7 |
| Q402 | F-9 |
| Q403 | E-9 |

## 5-11. SCHEMATIC DIAGRAM – MD Section (1/2) –

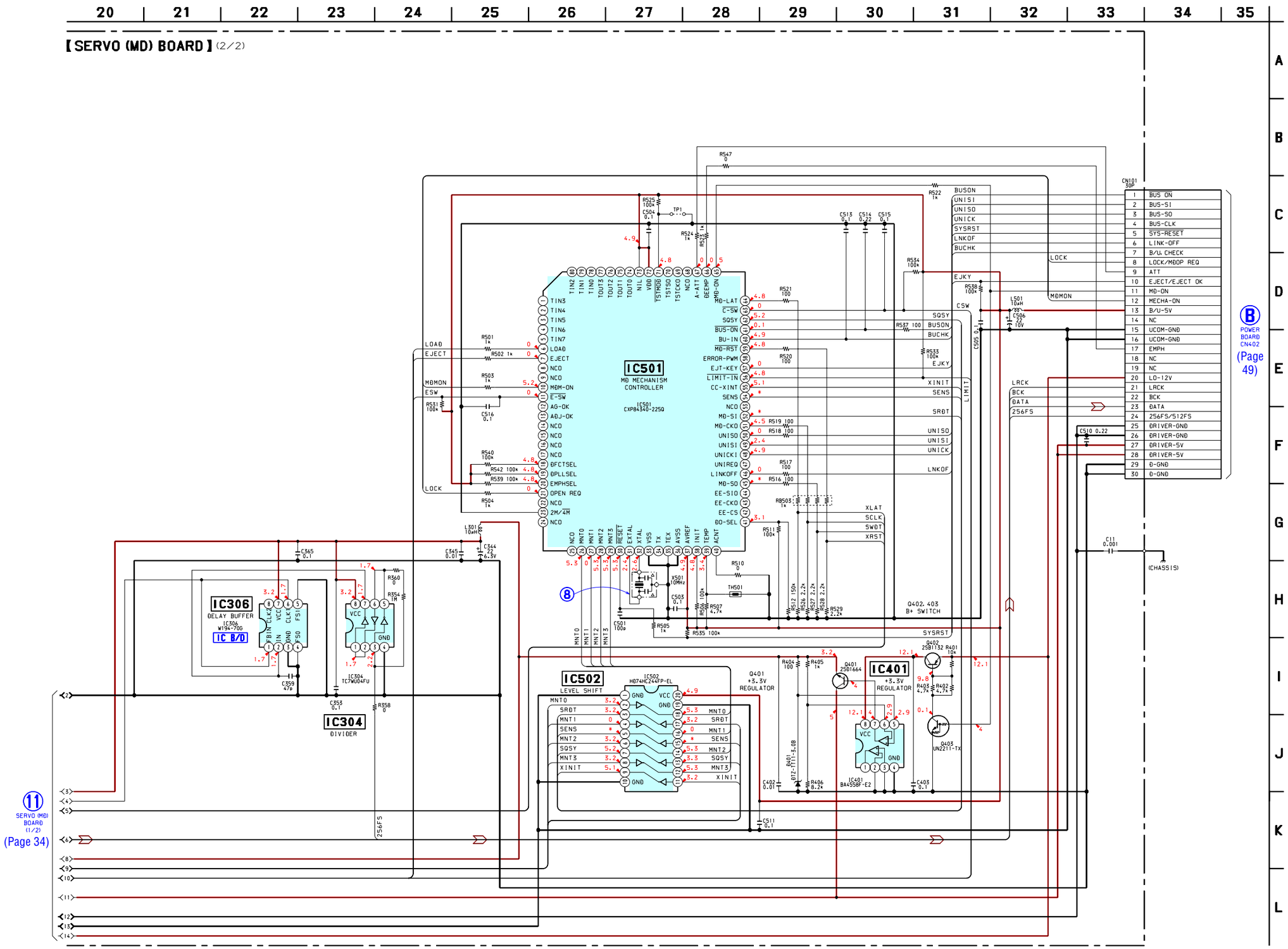
• See page 52 for Waveforms. • See page 55 for IC Block Diagrams.




The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

## 5-12. SCHEMATIC DIAGRAM – MD Section (2/2) – • See page 52 for Waveform. • See page 55 for IC Block Diagram.

【SERVO (MD) BOARD】(2/2)



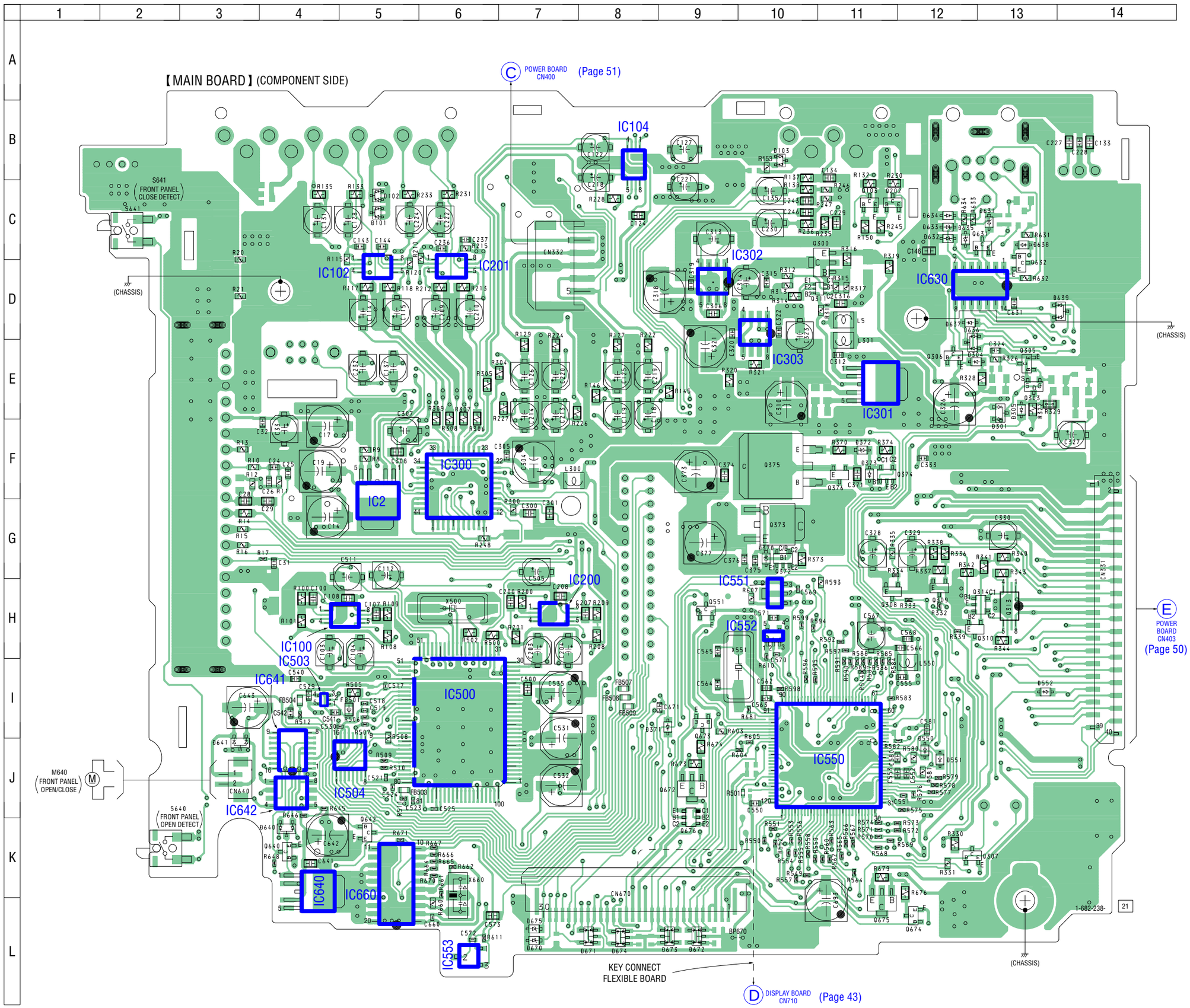
## 5-13. PRINTED WIRING BOARDS – MAIN Board (Component Side) –

• See page 29 for Circuit Boards Location.

:Uses unleaded solder.

- **Semiconductor Location**

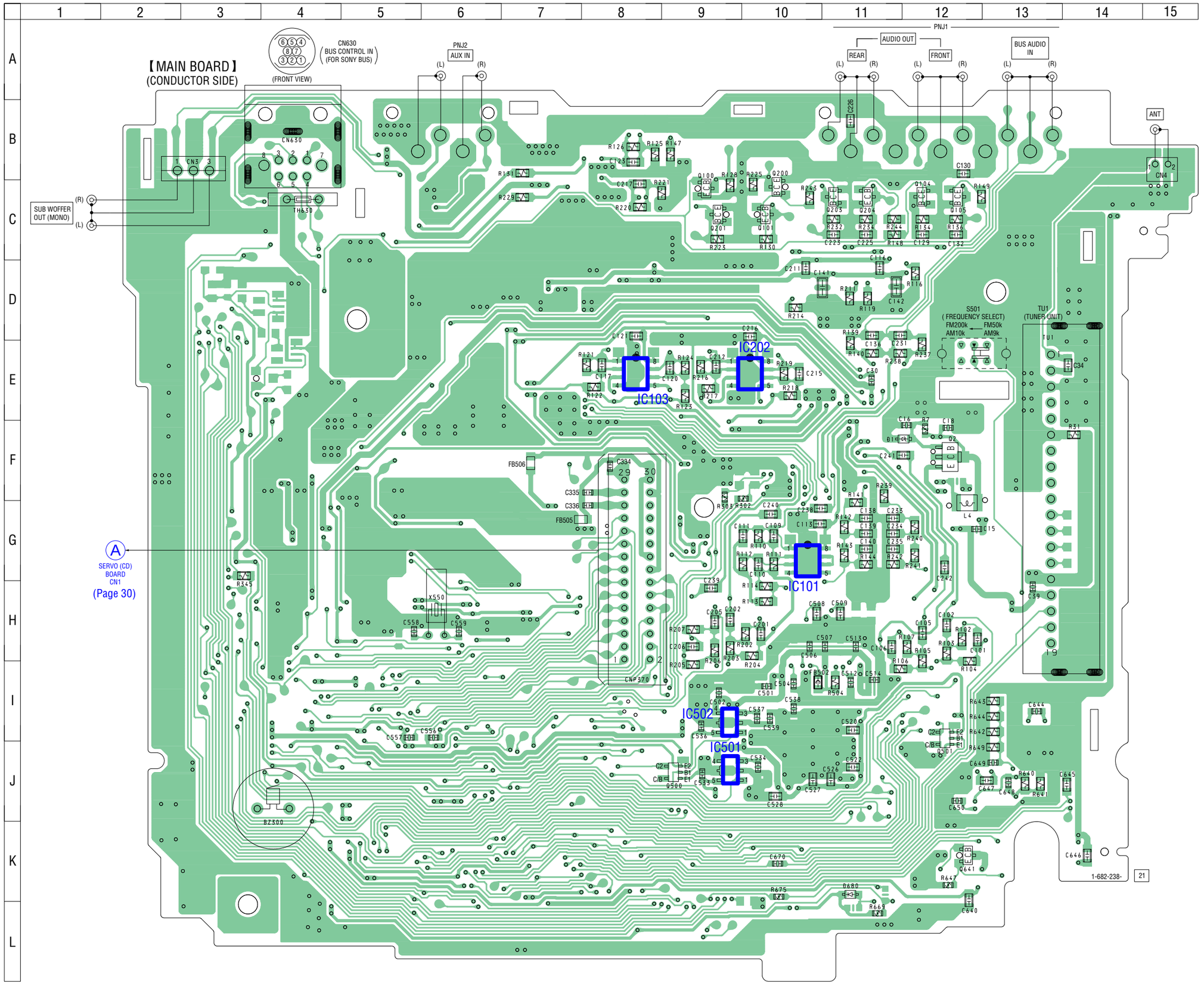
| Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|
| D101 | C-5 | IC500 | I-6 |
| D102 | C-5 | IC503 | I-4 |
| D103 | B-10 | IC504 | J-5 |
| D301 | E-13 | IC550 | J-11 |
| D304 | E-12 | IC551 | H-10 |
| D305 | E-13 | IC552 | H-10 |
| D370 | G-10 | IC553 | L-6 |
| D371 | I-9 | IC630 | D-13 |
| D372 | F-11 | IC640 | K-4 |
| D373 | F-11 | IC641 | J-4 |
| D550 | J-12 | IC642 | J-4 |
| D551 | J-12 | IC660 | K-5 |
| D552 | I-13 | | |
| D631 | C-13 | Q103 | C-11 |
| D632 | C-12 | Q202 | C-11 |
| D633 | C-12 | Q300 | D-11 |
| D634 | C-12 | Q303 | E-13 |
| D635 | C-12 | Q305 | E-13 |
| D636 | E-12 | Q306 | E-12 |
| D637 | D-12 | Q307 | J-12 |
| D638 | C-13 | Q308 | H-11 |
| D639 | D-14 | Q309 | H-12 |
| D640 | K-4 | Q310 | H-12 |
| D641 | J-3 | Q311 | D-11 |
| D670 | L-7 | Q313 | H-13 |
| D671 | L-8 | Q314 | H-13 |
| D672 | L-9 | Q372 | G-10 |
| D673 | L-9 | Q373 | G-10 |
| D674 | L-8 | Q374 | F-11 |
| D675 | L-7 | Q375 | F-10 |
| | | Q376 | F-11 |
| IC2 | G-5 | Q551 | H-9 |
| IC100 | H-5 | Q631 | C-13 |
| IC102 | D-5 | Q632 | D-13 |
| IC104 | B-8 | Q640 | K-4 |
| IC200 | H-7 | Q642 | K-5 |
| IC201 | D-6 | Q672 | J-9 |
| IC300 | F-6 | Q673 | I-9 |
| IC301 | E-11 | Q674 | K-12 |
| IC302 | D-9 | Q675 | K-11 |
| IC303 | D-10 | Q676 | J-9 |



## 5-14. PRINTED WIRING BOARD – MAIN Board (Conductor Side) –

• See page 29 for Circuit Boards Location.

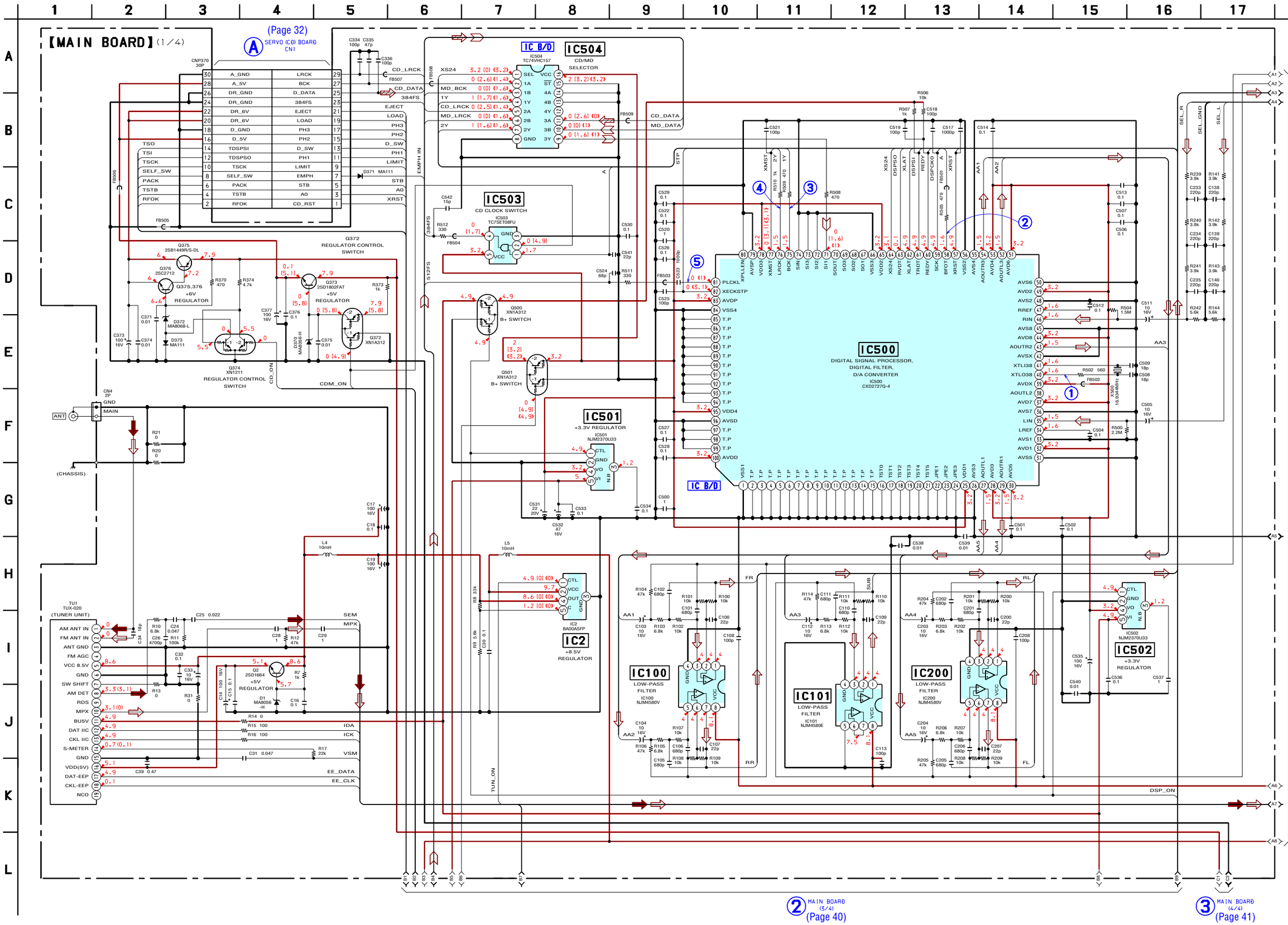
:Uses unleaded solder.



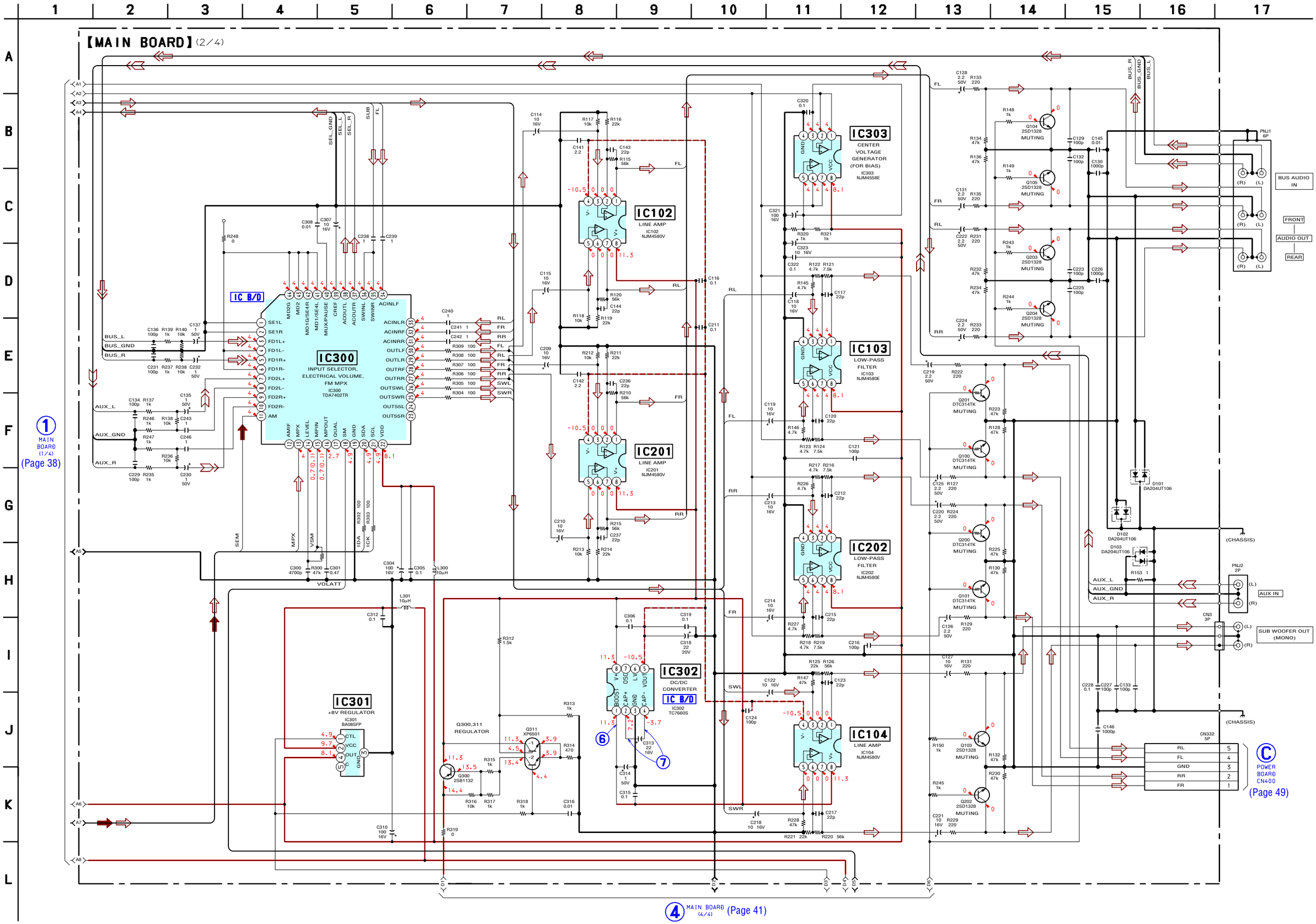

- **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D1 | F-12 |
| D680 | K-11 |
| IC101 | G-10 |
| IC103 | E-8 |
| IC202 | E-10 |
| IC501 | I-9 |
| IC502 | J-9 |
| Q2 | F-12 |
| Q100 | C-9 |
| Q101 | C-10 |
| Q104 | C-12 |
| Q105 | C-12 |
| Q200 | C-10 |
| Q201 | C-9 |
| Q203 | C-11 |
| Q204 | C-11 |
| Q500 | J-9 |
| Q501 | I-12 |
| Q641 | K-12 |

## 5-15. SCHEMATIC DIAGRAM – MAIN Board (1/4) – • See page 52 for Waveforms. • See page 55 for IC Block Diagrams.



## 5-16. SCHEMATIC DIAGRAM – MAIN Board (2/4) – • See page 52 for Waveforms. • See page 55 for IC Block Diagrams.



## 5-17. SCHEMATIC DIAGRAM – MAIN Board (3/4) – • See page 52 for Waveforms.

【MAIN BOARD】(3/4)

② MAIN BOARD (1/4) (Page 38)

⑤ MAIN BOARD (4/4) (Page 41)

Ⓓ DISPLAY BOARD CN710 (Page 45)

KEY CONNECT FLEXIBLE BOARD

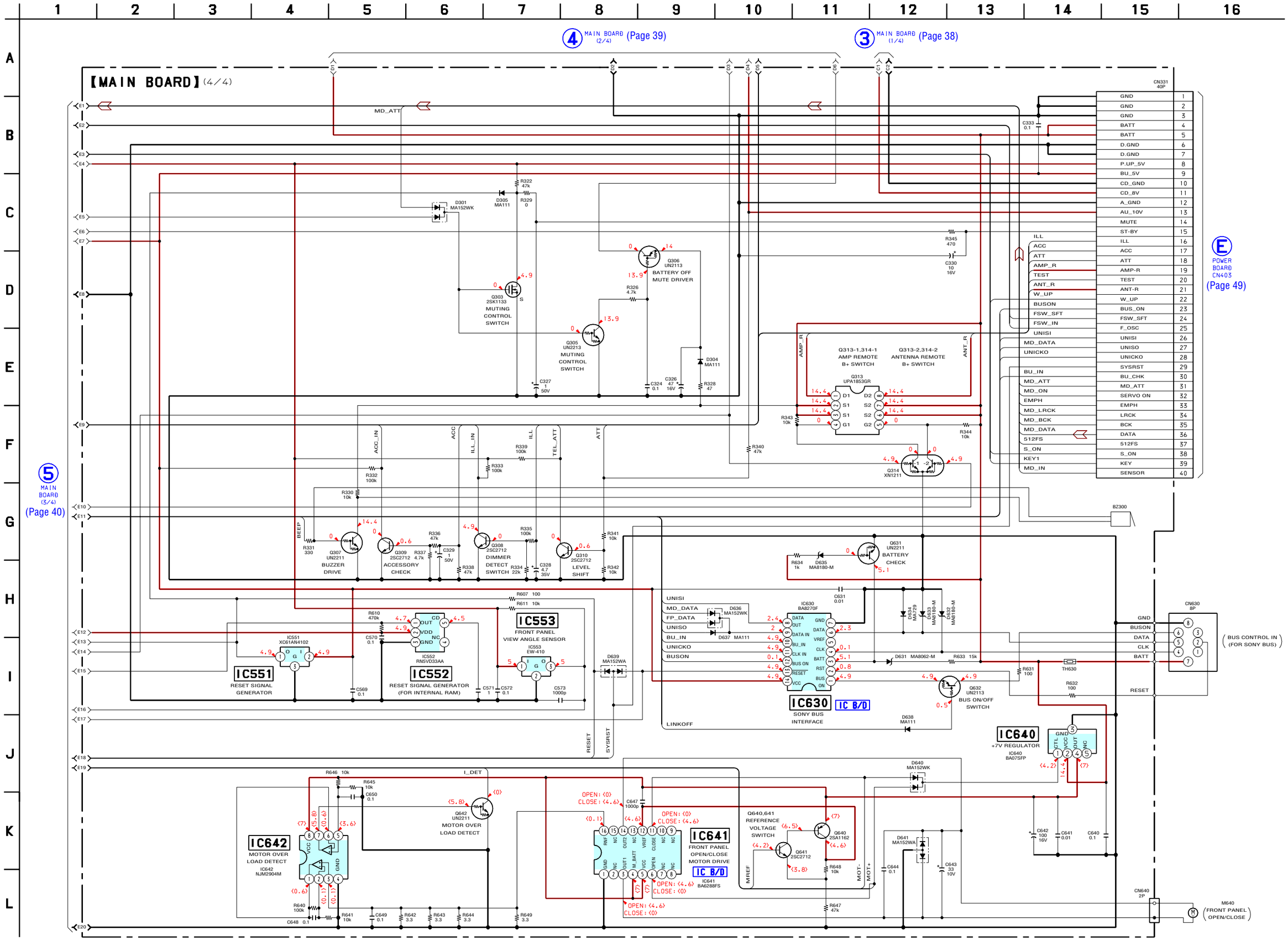
CN670 30P

| | |
|---|---|
| GND | 1 |
| ILL_ON | 2 |
| ILL_ON_LCD | 3 |
| ILL_ON_LCD | 4 |
| NC | 5 |
| NC | 6 |
| FLASH_W | 7 |
| TXD | 8 |
| RXD | 9 |
| BOOT | 10 |
| SPE_LAT | 11 |
| SPE_CLK | 12 |
| SPE_SI | 13 |
| ILL_GND | 14 |
| ILL_ON_LED | 15 |
| P_ON_LED | 16 |
| BUCK_UP_5V | 17 |
| BU_GND | 18 |
| SYSTEM RESET | 19 |
| BUSON | 20 |
| BU_IN | 21 |
| UNISI | 22 |
| FP_DATA | 23 |
| UNICKO | 24 |
| LEVEL_L | 25 |
| LEVEL_R | 26 |
| SIRCS | 27 |
| RESET | 28 |
| LINK-OFF | 29 |
| KEY0 | 30 |

IC550
MASTER CONTROLLER
(CD MECHANISM CONTROLLER)
IC550
M89574CPMT
-G-382-BNDE1

IC660
SIRCS CONTROLLER
IC660 RRX9000-0401R/01

## 5-18. SCHEMATIC DIAGRAM – MAIN Board (4/4) – • See page 55 for IC Block Diagrams.



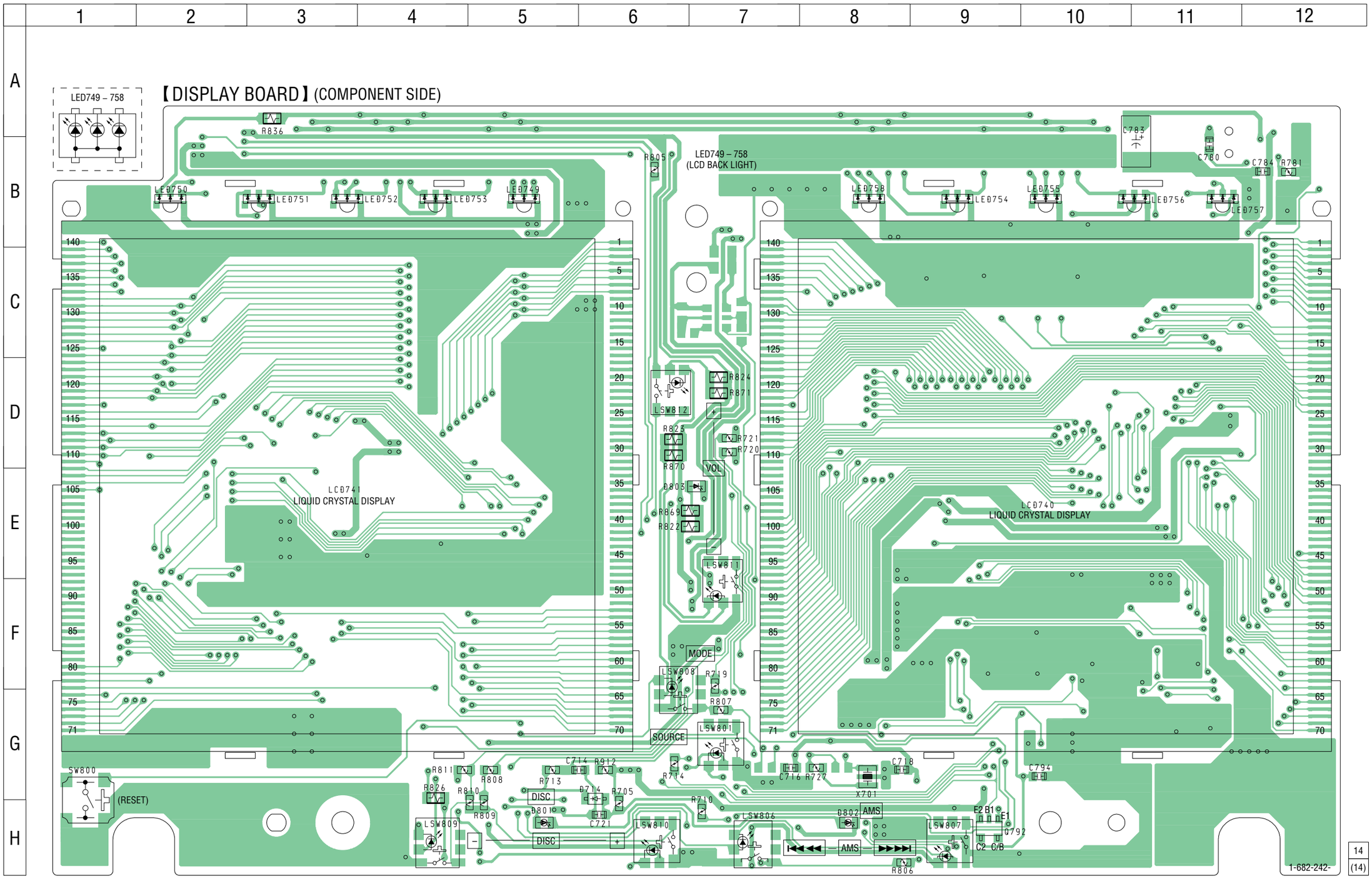
## 5-19. PRINTED WIRING BOARD – DISPLAY Board (Component Side) –

• See page 29 for Circuit Boards Location.

:Uses unleaded solder.

• **Semiconductor Location**

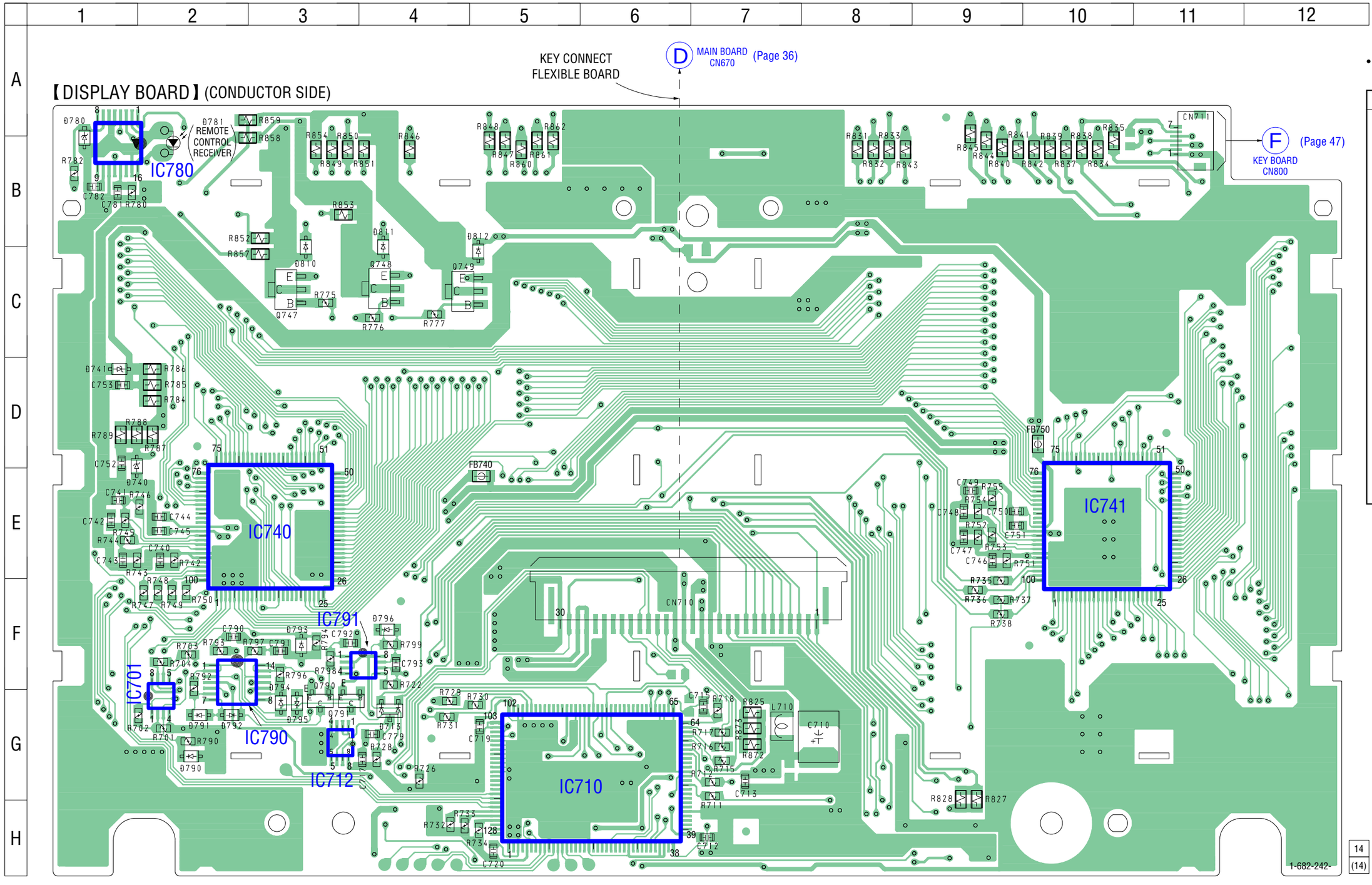
| Ref. No. | Location |
|---|---|
| D714 | G-6 |
| D801 | H-5 |
| D802 | H-8 |
| D803 | E-7 |
| | |
| LED749 | B-5 |
| LED750 | B-2 |
| LED751 | B-3 |
| LED752 | B-3 |
| LED753 | B-4 |
| LED754 | B-9 |
| LED755 | B-10 |
| LED756 | B-11 |
| LED757 | B-11 |
| LED758 | B-8 |
| | |
| Q792 | H-9 |



## 5-20. PRINTED WIRING BOARDS – DISPLAY Board (Conductor Side) –

• See page 29 for Circuit Boards Location.

:Uses unleaded solder.

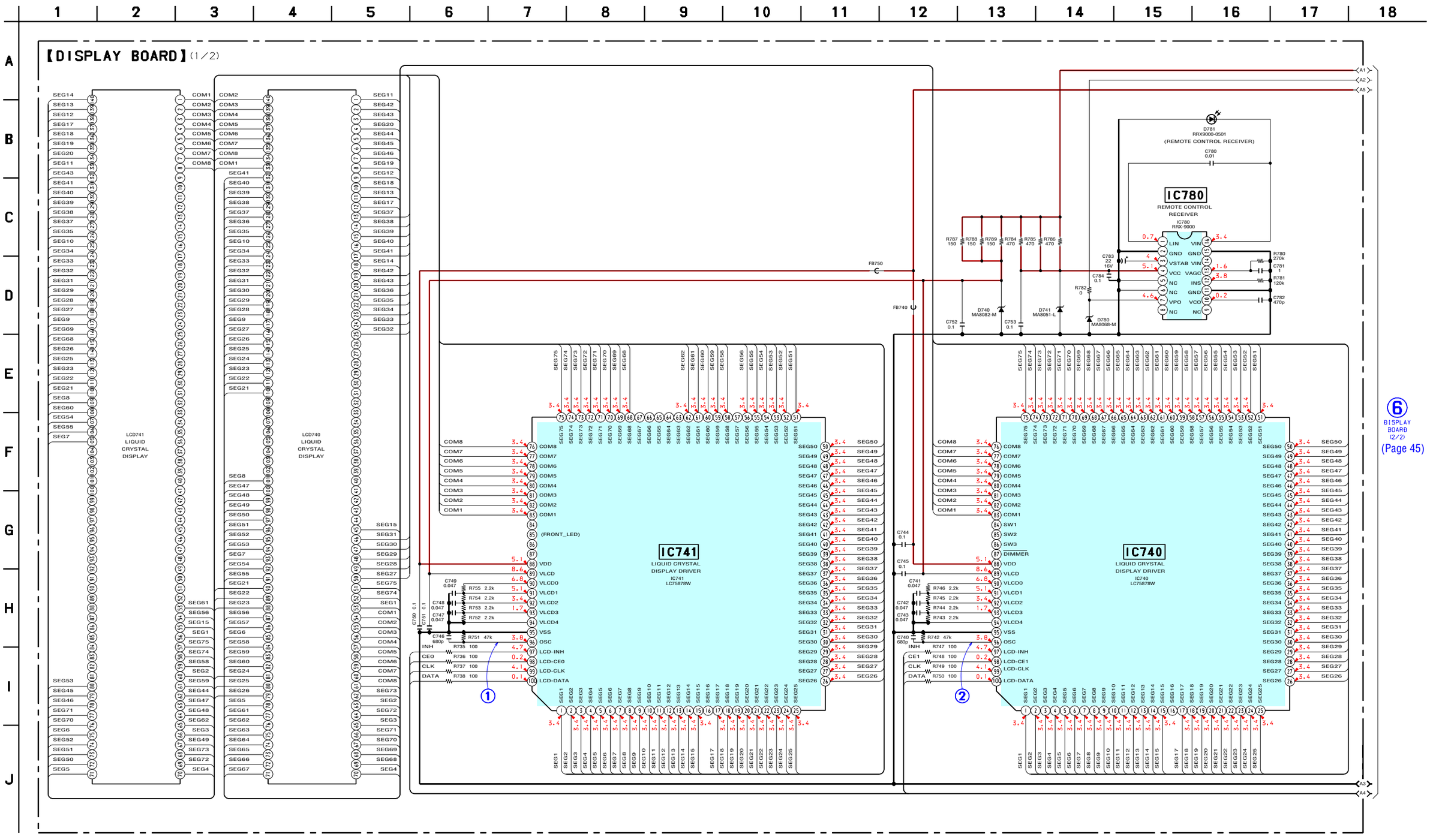



- **Semiconductor Location**

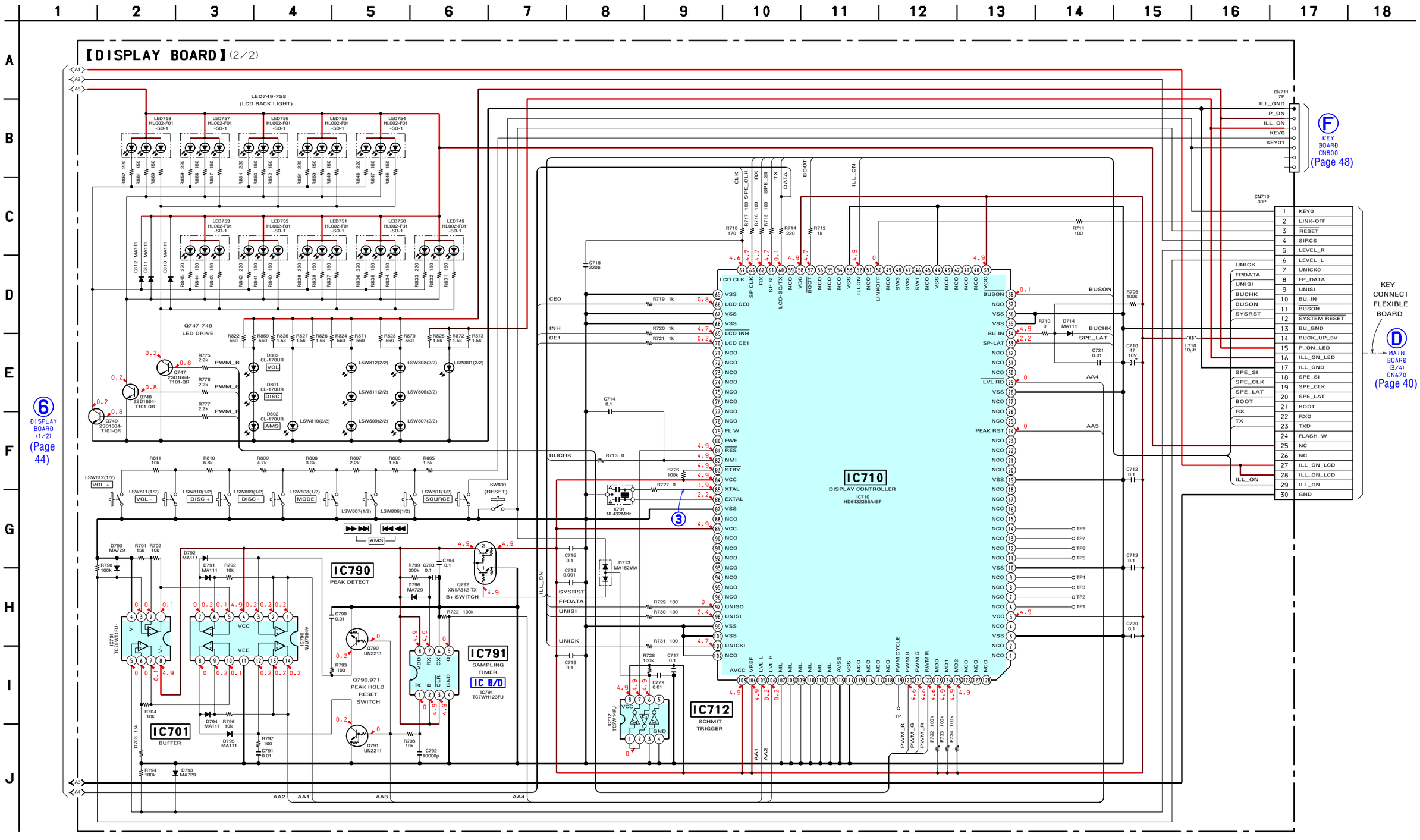
| Ref. No. | Location |
|---|---|
| D713 | G-4 |
| D740 | E-1 |
| D741 | D-1 |
| D780 | B-1 |
| D781 | B-2 |
| D790 | G-2 |
| D791 | G-2 |
| D792 | G-2 |
| D793 | F-3 |
| D794 | G-3 |
| D795 | G-3 |
| D796 | F-4 |
| D810 | C-3 |
| D811 | C-4 |
| D812 | C-5 |
| IC701 | G-2 |
| IC710 | G-6 |
| IC712 | G-3 |
| IC740 | E-3 |
| IC741 | E-10 |
| IC780 | B-1 |
| IC790 | F-2 |
| IC791 | F-4 |
| Q747 | C-3 |
| Q748 | C-4 |
| Q749 | C-4 |
| Q790 | G-3 |
| Q791 | G-3 |

## 5-21. SCHEMATIC DIAGRAM – DISPLAY Board (1/2) –

• See page 52 for Waveforms. • See page 55 for IC Block Diagram.

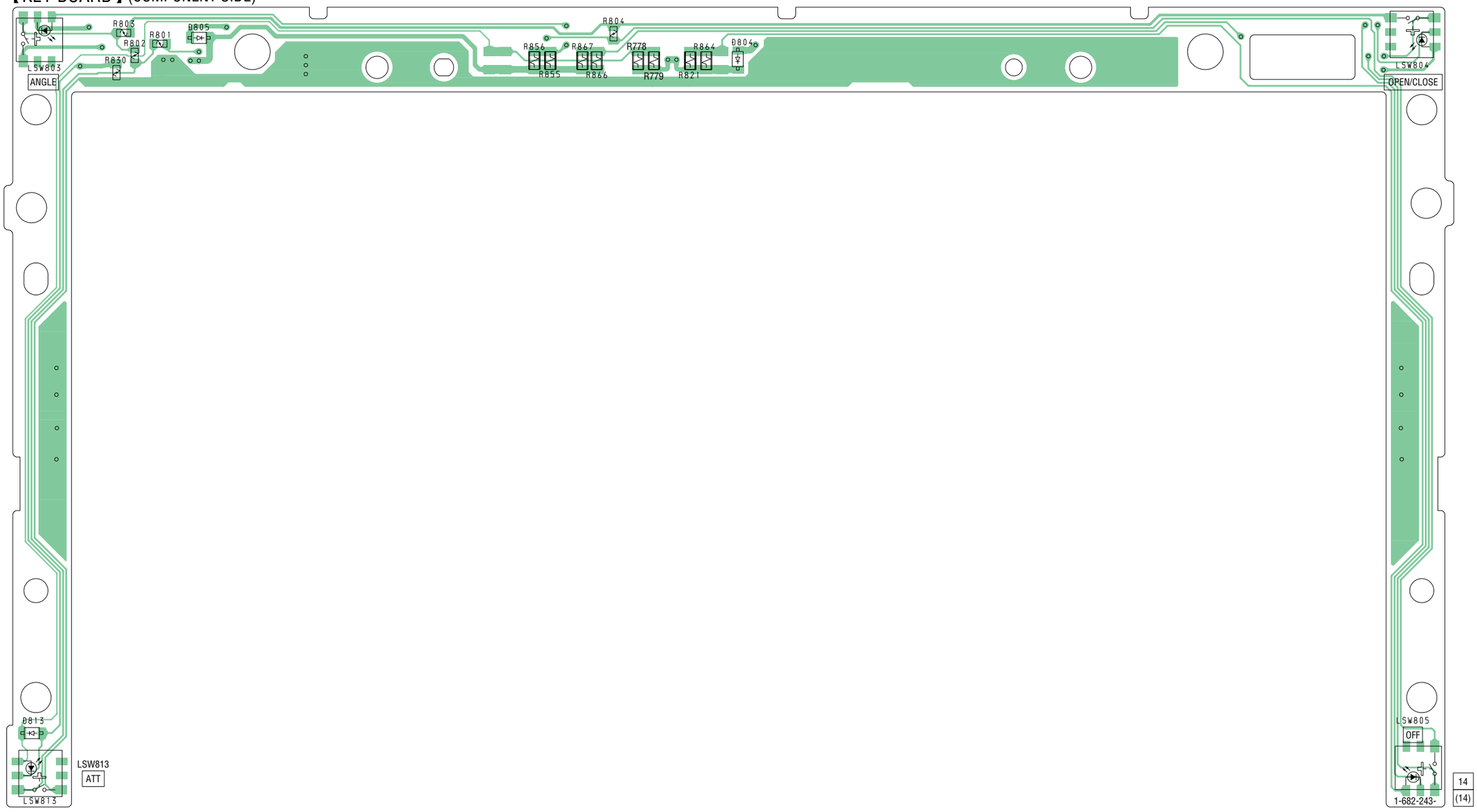


## 5-22. SCHEMATIC DIAGRAM – DISPLAY Board (2/2) – • See page 52 for Waveform. • See page 55 for IC Block Diagram.



**5-23. PRINTED WIRING BOARD – KEY Board (Component Side) –** **• See page 29 for Circuit Boards Location.** **:Uses unleaded solder.**

【KEY BOARD】(COMPONENT SIDE)

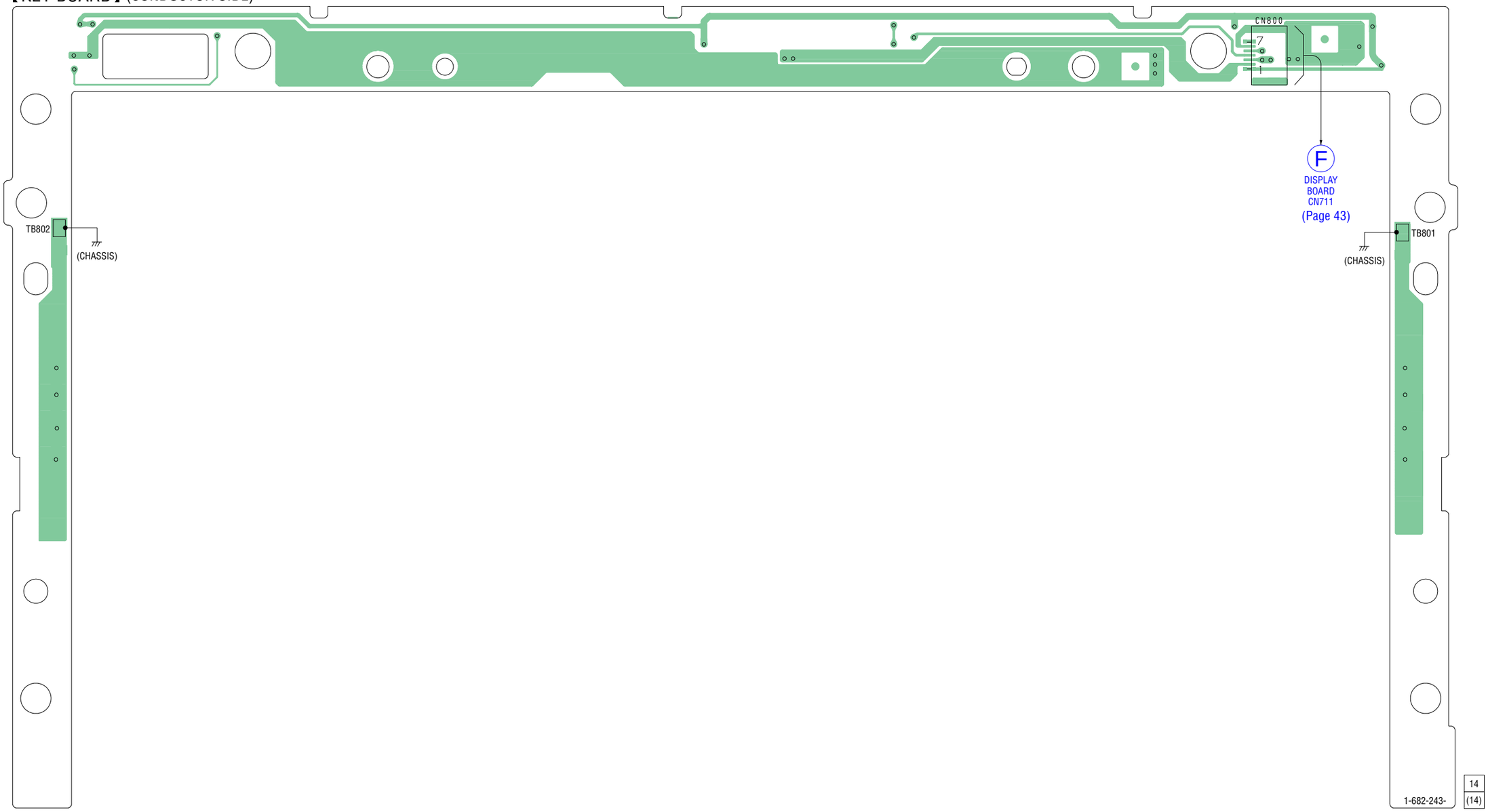


## 5-24. PRINTED WIRING BOARD – KEY Board (Conductor Side) –

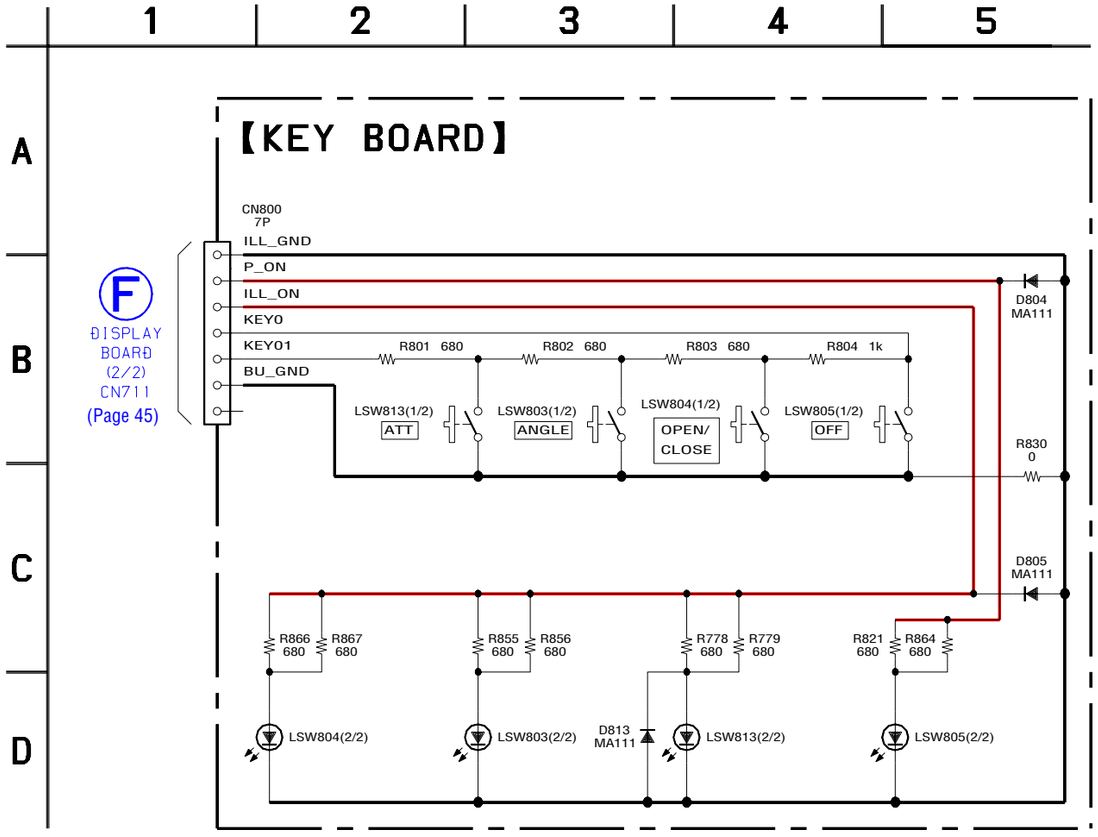
• See page 29 for Circuit Boards Location.

:Uses unleaded solder.

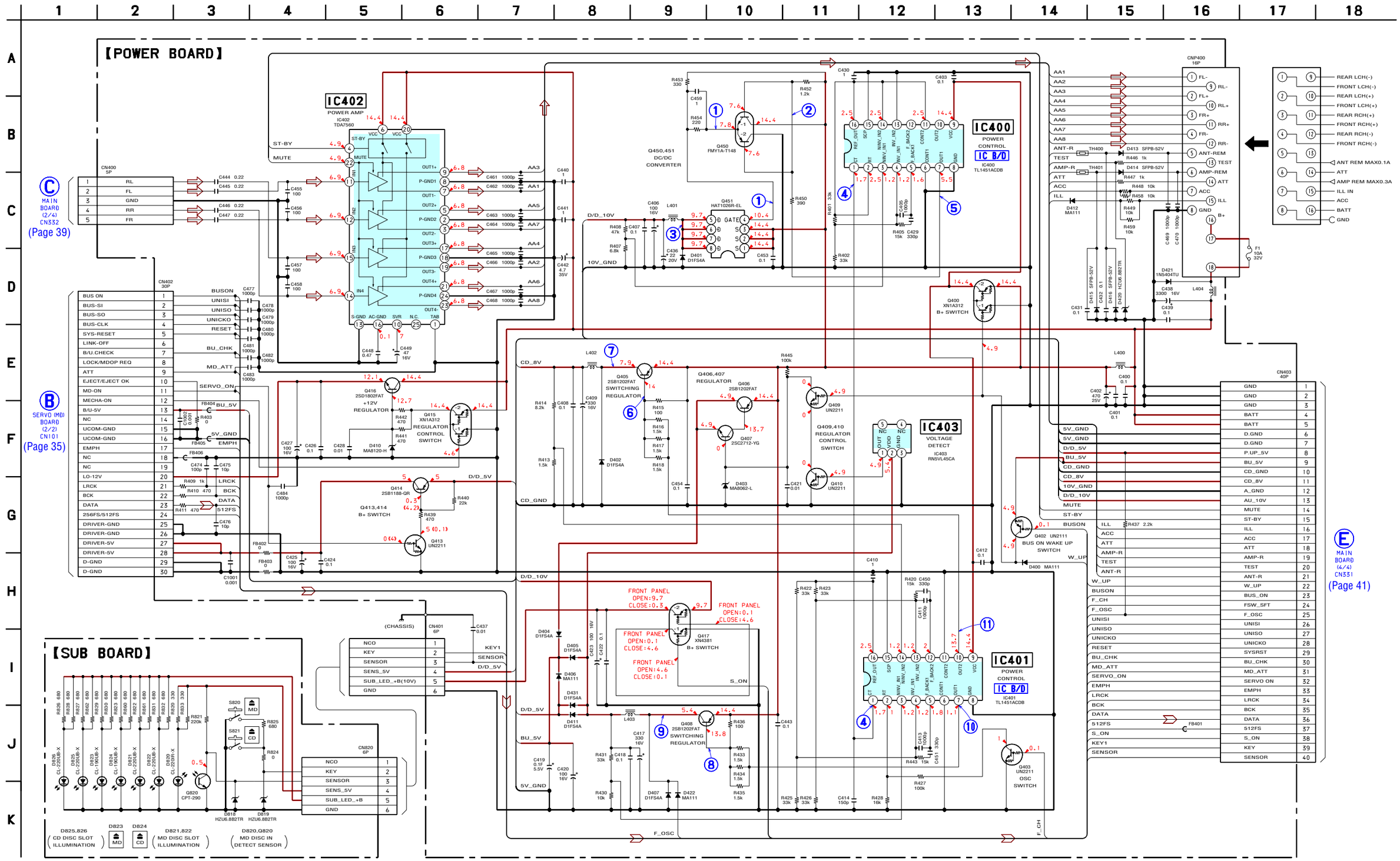
【KEY BOARD】(CONDUCTOR SIDE)



## 5-25. SCHEMATIC DIAGRAM – KEY Board –



## 5-26. SCHEMATIC DIAGRAM – SUB/POWER Boards – • See page 52 for Waveform. • See page 55 for IC Block Diagram.



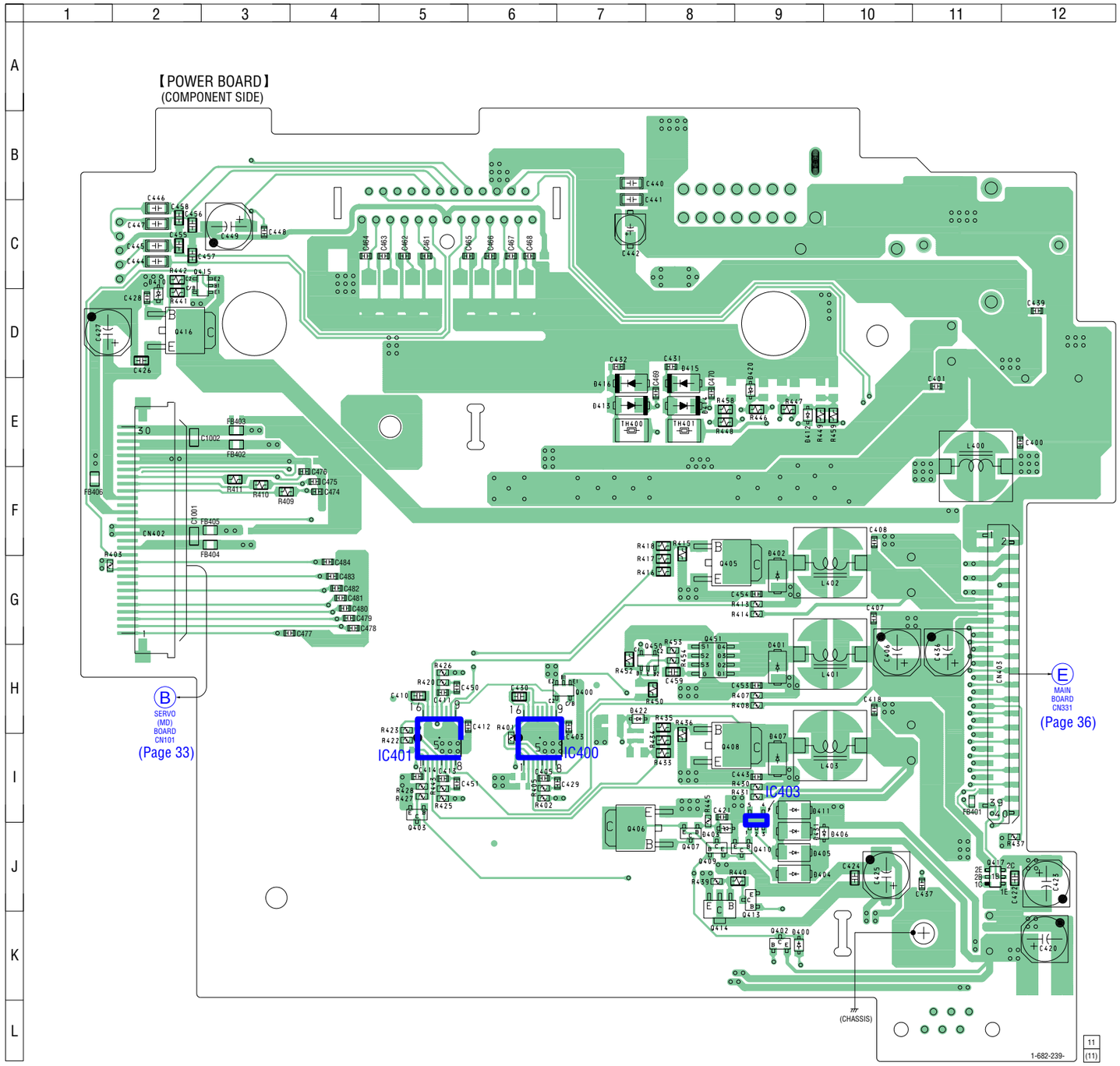
## 5-27. PRINTED WIRING BOARD – POWER Board (Component Side) –

• See page 29 for Circuit Boards Location.

:Uses unleaded solder.

- **Semiconductor Location**

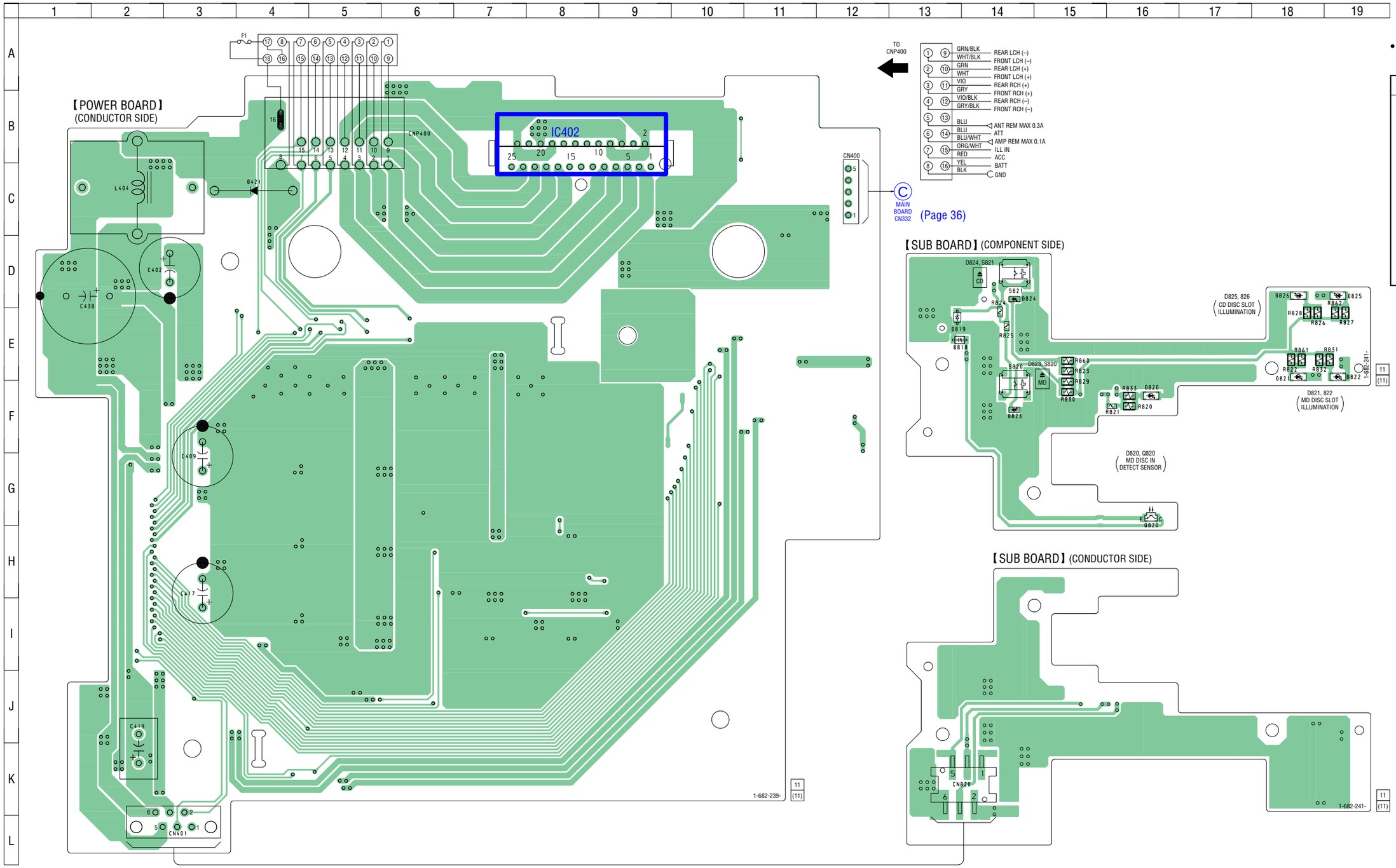
| Ref. No. | Location |
|---|---|
| D400 | K-9 |
| D401 | H-9 |
| D402 | G-9 |
| D403 | J-8 |
| D404 | J-9 |
| D405 | J-9 |
| D406 | K-10 |
| D407 | I-9 |
| D410 | D-2 |
| D411 | I-9 |
| D412 | E-9 |
| D413 | E-7 |
| D414 | E-8 |
| D415 | E-8 |
| D416 | E-7 |
| D420 | E-9 |
| D422 | H-7 |
| D431 | J-9 |
| IC400 | I-6 |
| IC401 | I-5 |
| IC403 | I-9 |
| Q400 | H-7 |
| Q402 | K-9 |
| Q403 | I-5 |
| Q405 | G-8 |
| Q406 | J-7 |
| Q407 | J-8 |
| Q408 | I-8 |
| Q409 | J-8 |
| Q410 | J-9 |
| Q413 | J-9 |
| Q414 | J-8 |
| Q415 | C-3 |
| Q416 | D-2 |
| Q417 | J-11 |
| Q450 | H-8 |
| Q451 | H-8 |



## 5-28. PRINTED WIRING BOARDS – POWER Board (Conductor Side)/SUB Board –

• See page 29 for Circuit Boards Location.

:Uses unleaded solder.



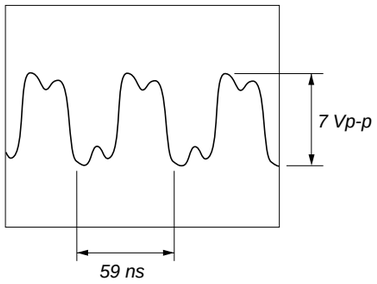

- **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D421 | C-4 |
| D818 | E-13 |
| D819 | E-13 |
| D820 | F-16 |
| D821 | E-18 |
| D822 | E-19 |
| D823 | F-14 |
| D824 | D-14 |
| D825 | D-19 |
| D826 | D-18 |
| IC402 | B-8 |
| Q820 | G-16 |

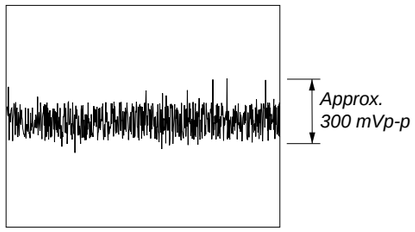
- **Waveforms**

**– SERVO (CD) Board –**

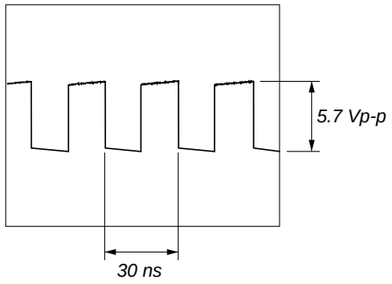
❶ IC1 ㉔ (XTAL) (CD Play Mode)



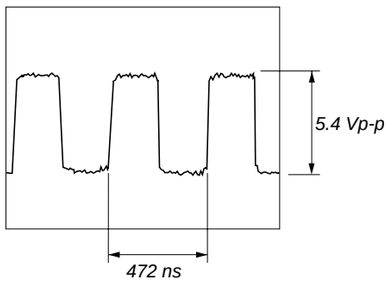

❻ IC1 ㉛ (FEO) (CD Play Mode)



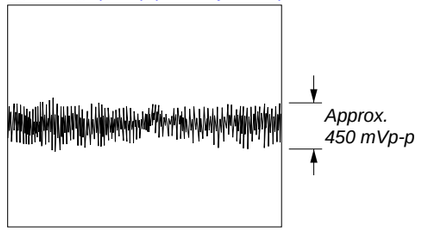

❹ IC303 ㉜ (CAPA–) (MD Play Mode)



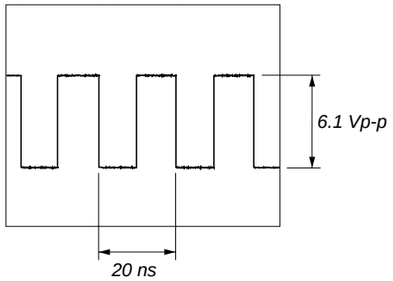

❷ IC1 ㉜ (SCKO) (CD Play Mode)



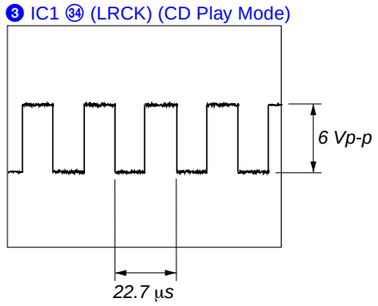

❼ IC1 ㉝ (TEO) (CD Play Mode)




❺ IC303 ㉛ (CAPA+) (MD Play Mode)

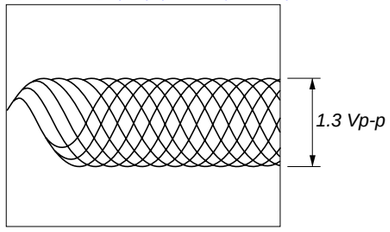



❸ IC1 ㉞ (LRCK) (CD Play Mode)

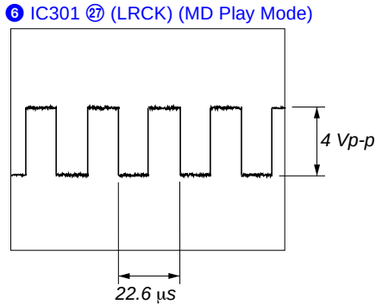



**– SERVO (MD) Board –**

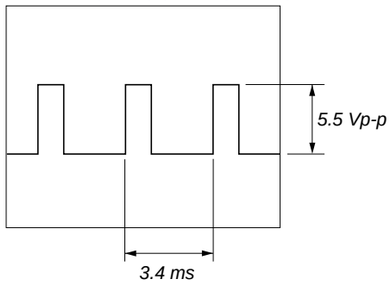
❶ IC302 ㊳ (RF) (MD Play Mode)



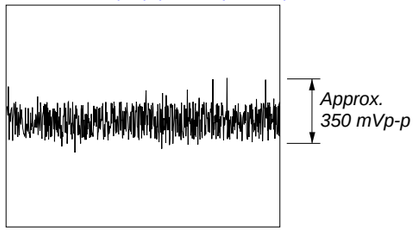

❻ IC301 ㉗ (LRCK) (MD Play Mode)



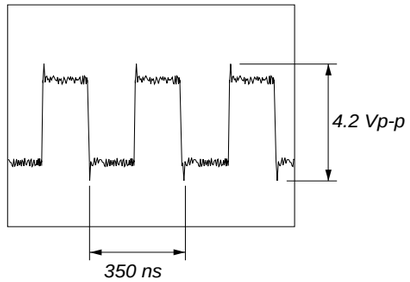

❹ IC1 ㊷ (PACK) (CD Play Mode)



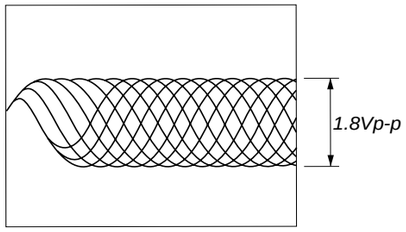

❷ IC302 ㉞ (FE) (MD Play Mode)



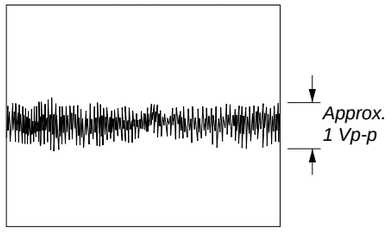

❼ IC301 ㉘ (XBCK) (MD Play Mode)



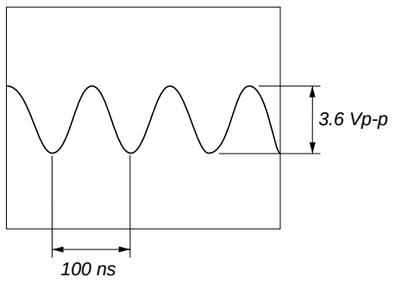

❺ IC1 ㊼ (RFO) (CD Play Mode)




❸ IC302 ㉖ (TE) (MD Play Mode)

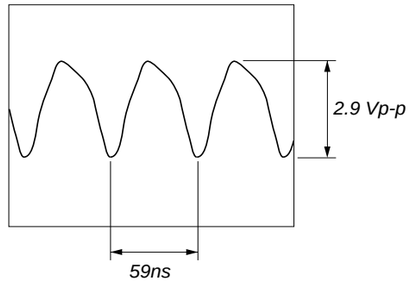



❽ IC501 ㉛ (EXTAL)

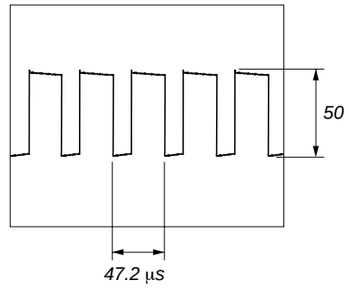



**– MAIN Board –**

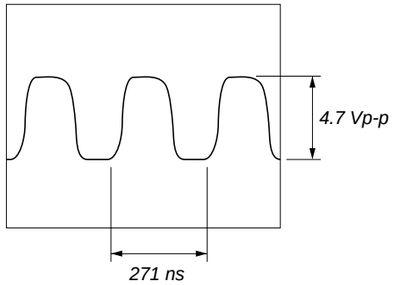
❶ IC500 ㊵ (XTLO38)



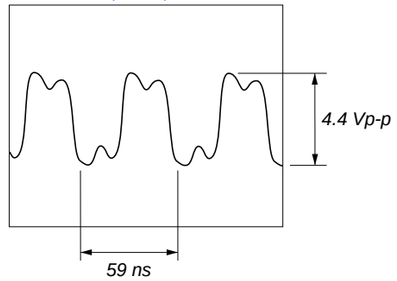

❻ IC302 ① (BOOST)



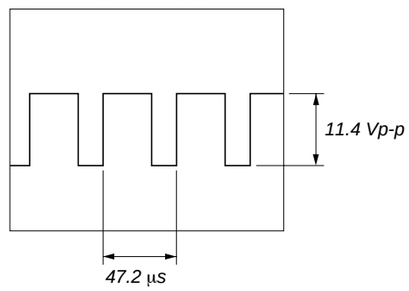

⓫ IC550 ㉝ (X1)



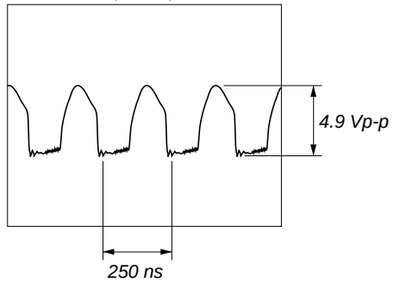

❷ IC500 ㊽ (BFOT)



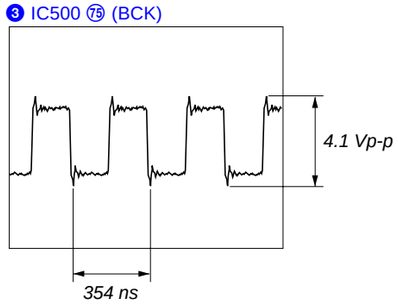

❼ IC302 ② (CAP+), ④ (CAP–)



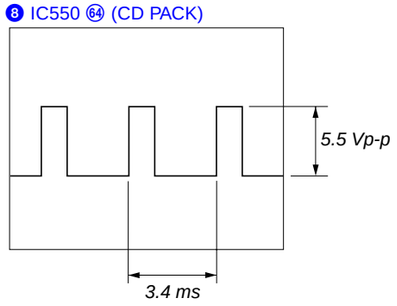

⓬ IC660 ④ (XOUT)



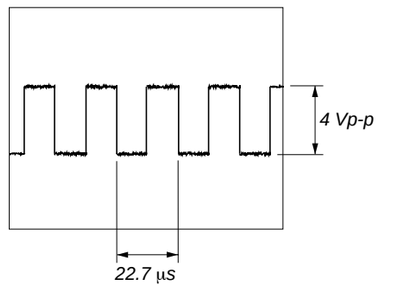

❸ IC500 ㊺ (BCK)



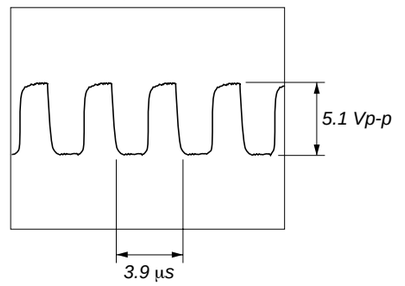

❽ IC550 ㊹ (CD PACK)



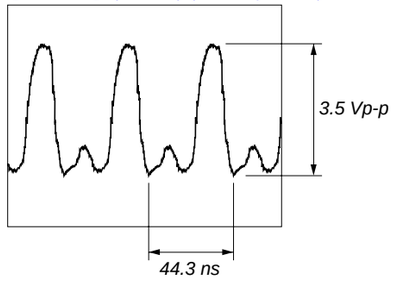

❹ IC500 ㊻ (LRCK)



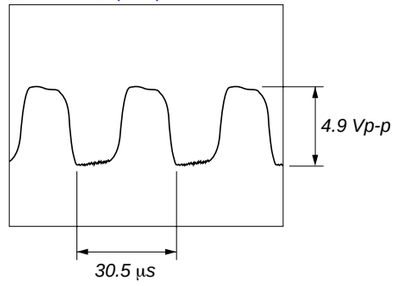

❾ IC550 ㊺ (FSW IN)




❺ IC500 ㊶ (PLCKL) (MD Play Mode)

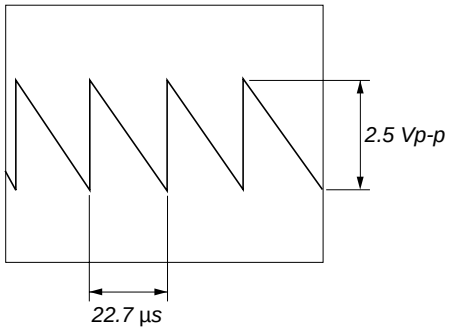



❿ IC550 ㊸ (X1A)

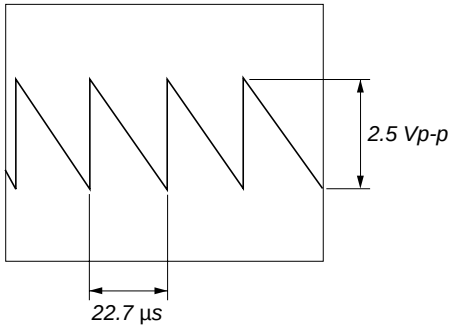


**– DISPLAY Board –**

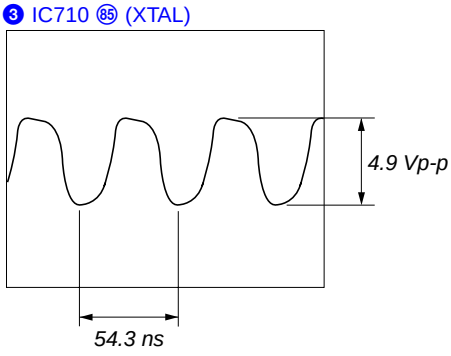
❶ IC741 ㊾ (OSC)



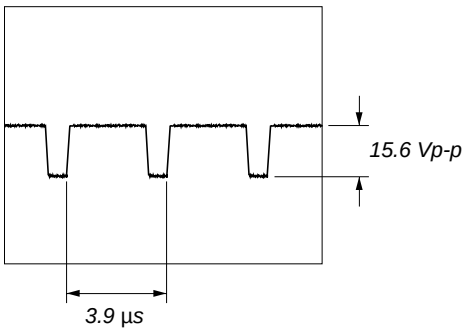

❷ IC740 ㊾ (OSC)



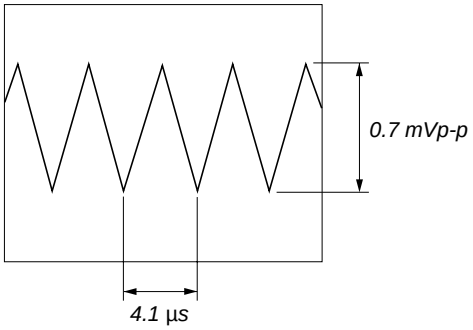

❸ IC710 ㉟ (XTAL)



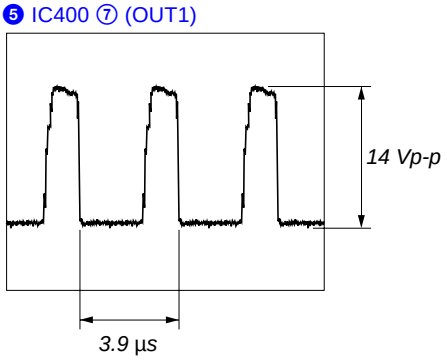

❸ Q450 (Drain)




❹ IC400 ① (CT), IC401 ① (CT)

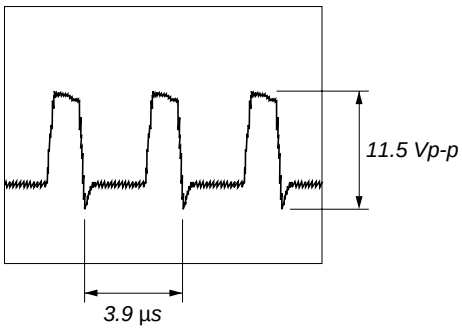



❺ IC400 ⑦ (OUT1)

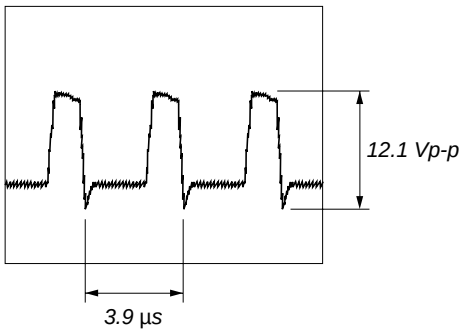



**– POWER Board –**

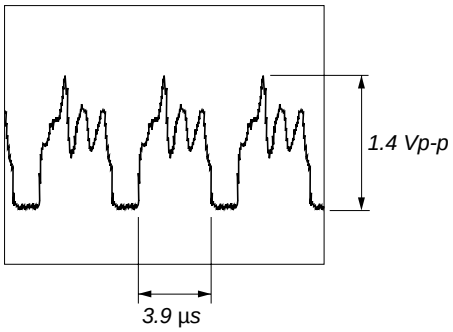
❶ Q450 (Emitter), Q451 (Gate)



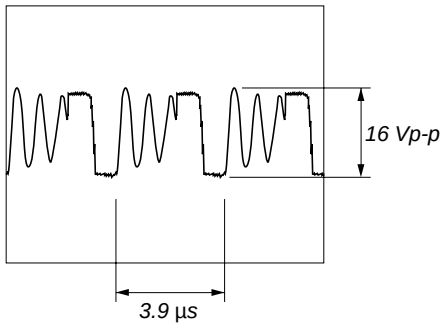

❷ Q450 (Base)



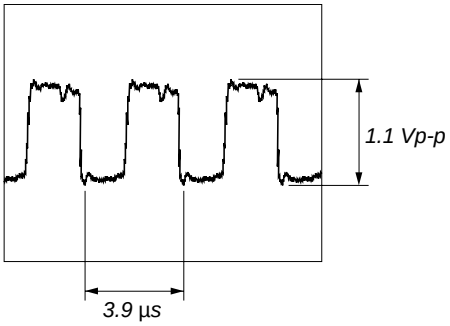

❻ Q405 (Base)



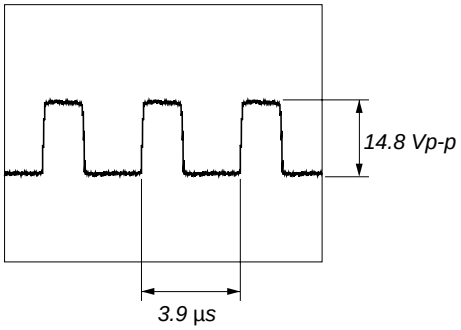

❼ Q405 (Collector)



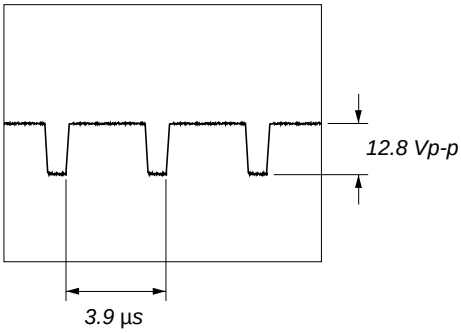
❽ Q408 (Base)



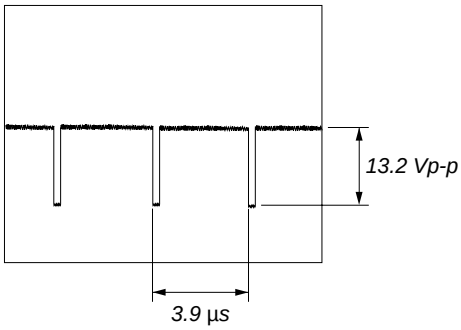

❾ IC408 (Collector)




❿ IC401 ⑦ (OUT1)



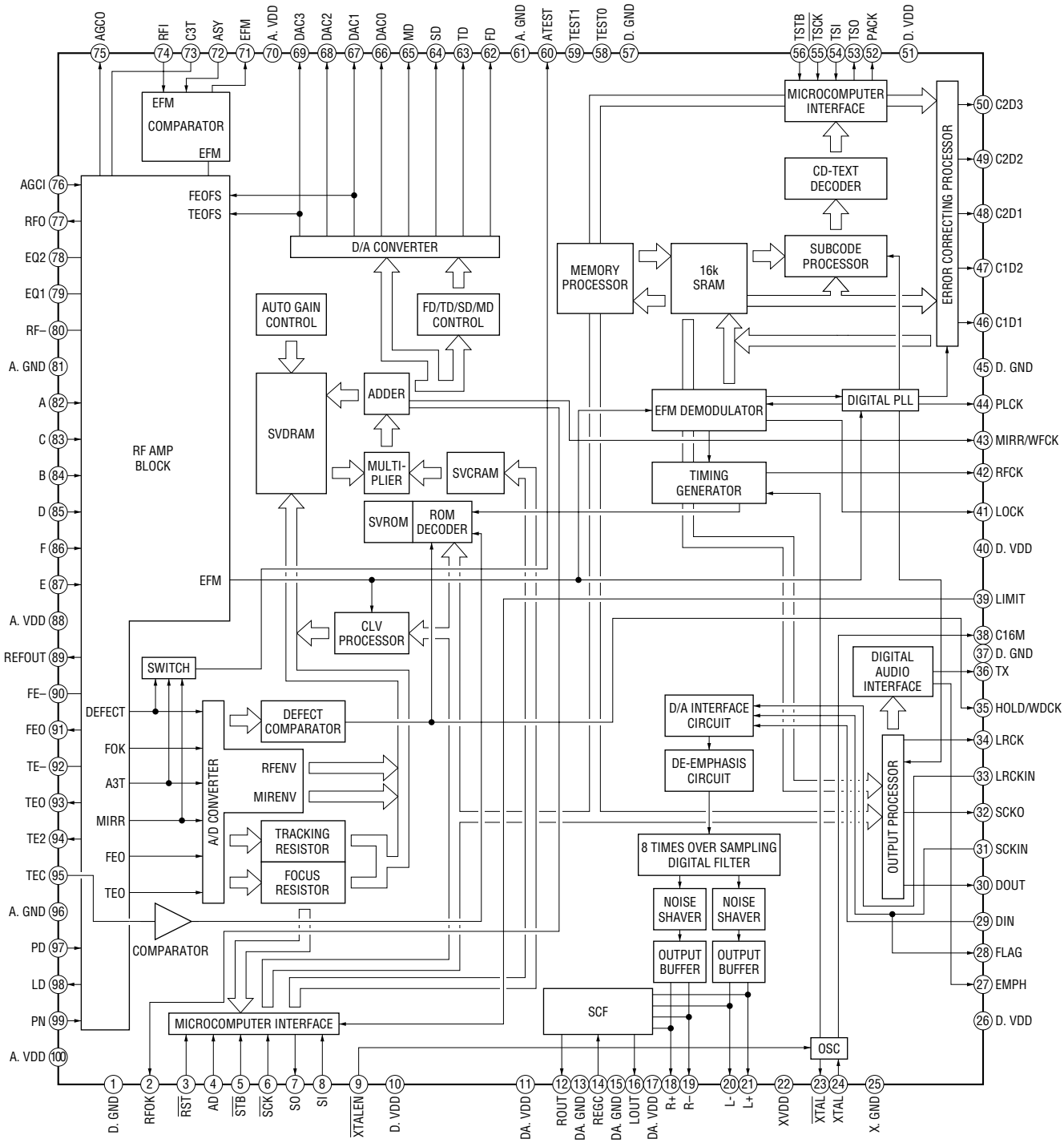

⓫ Q401 ⑩ (OUT2)



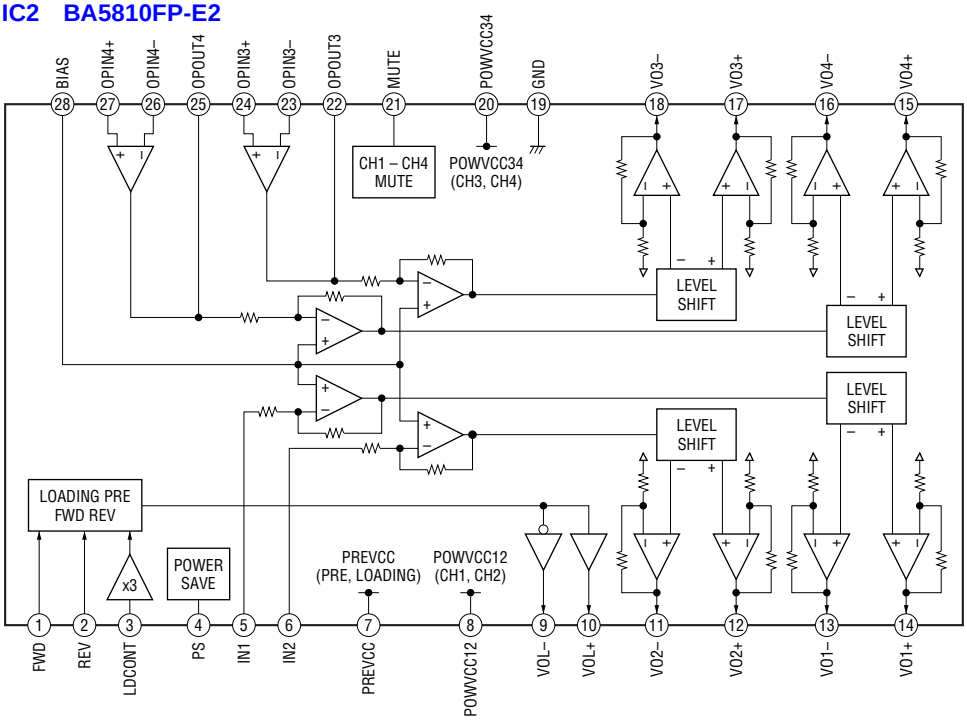
• **IC Block Diagrams**

**– SERVO (CD) Board –**

**IC1 μPD63711GC-8EU**

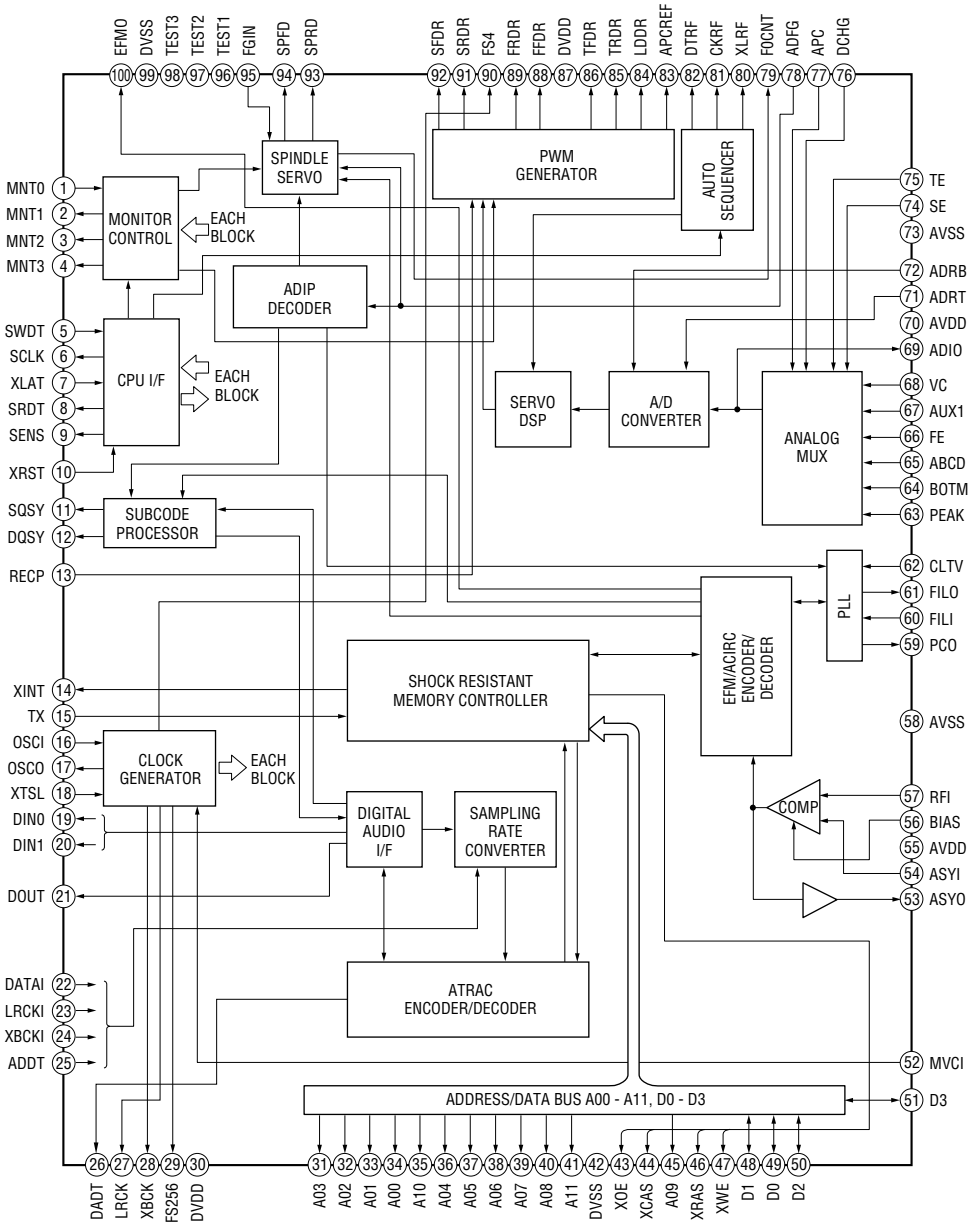


## IC2 BA5810FP-E2

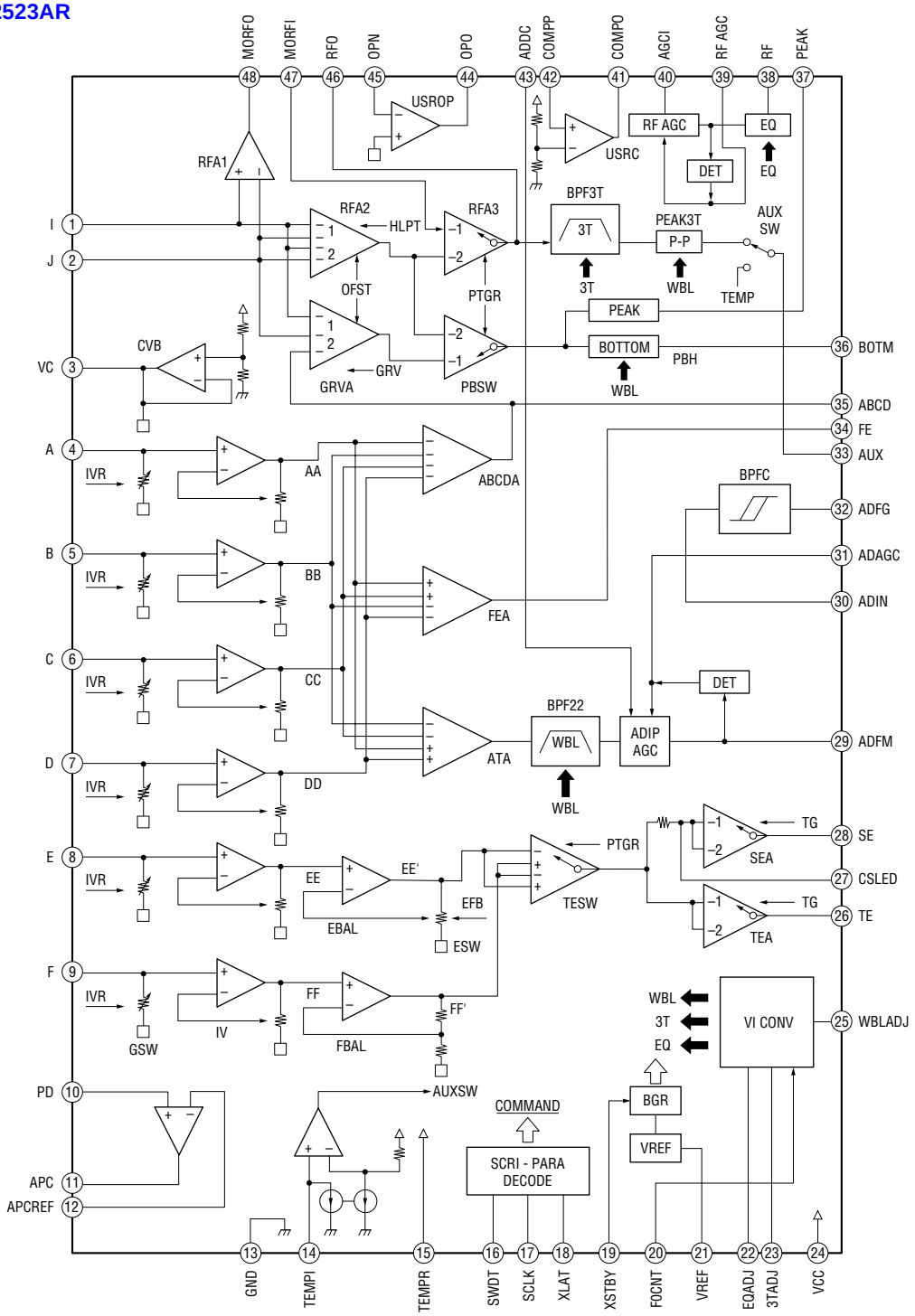


**– SERVO (MD) Board –**

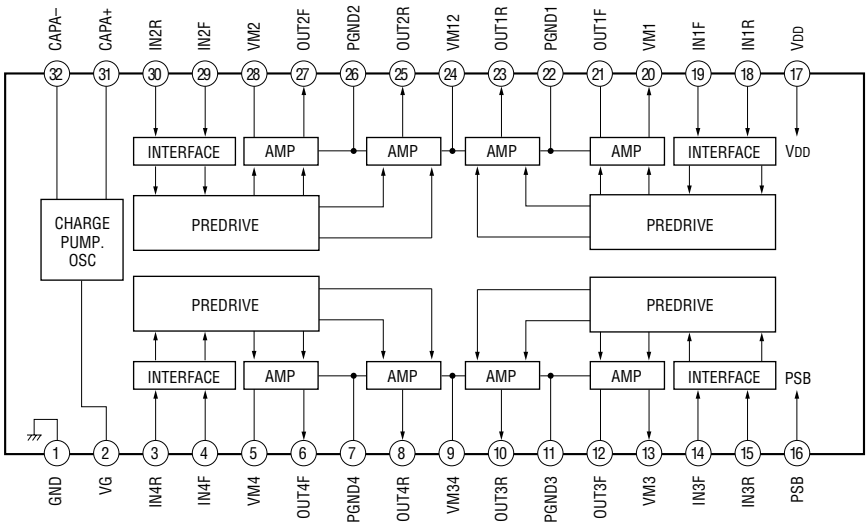
**IC301 CXD2662R**



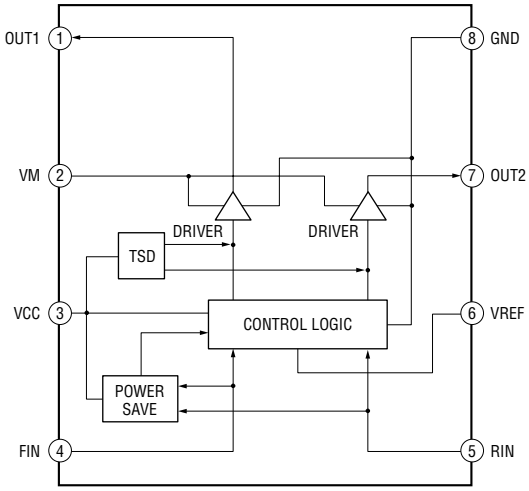
## IC302 CXA2523AR



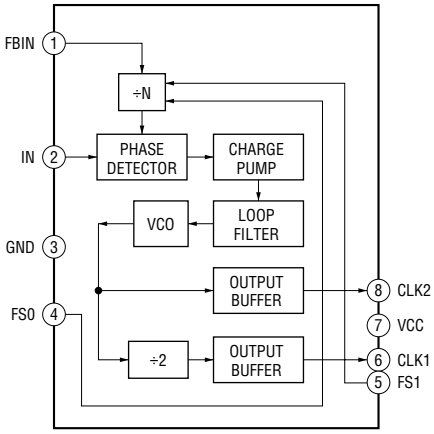
## IC303 BH6518FS-E2



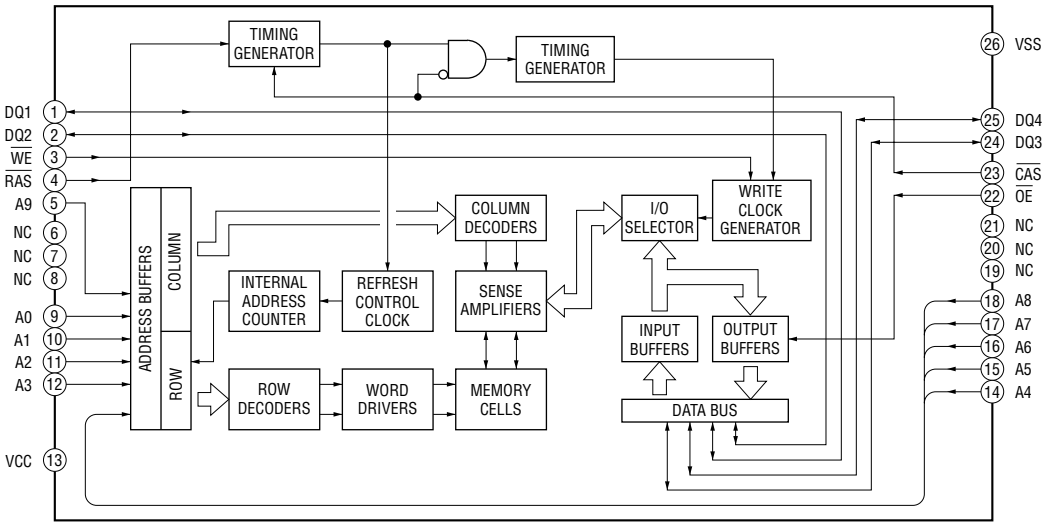

## IC305 BA6287F




## IC306 W194-70G-T2

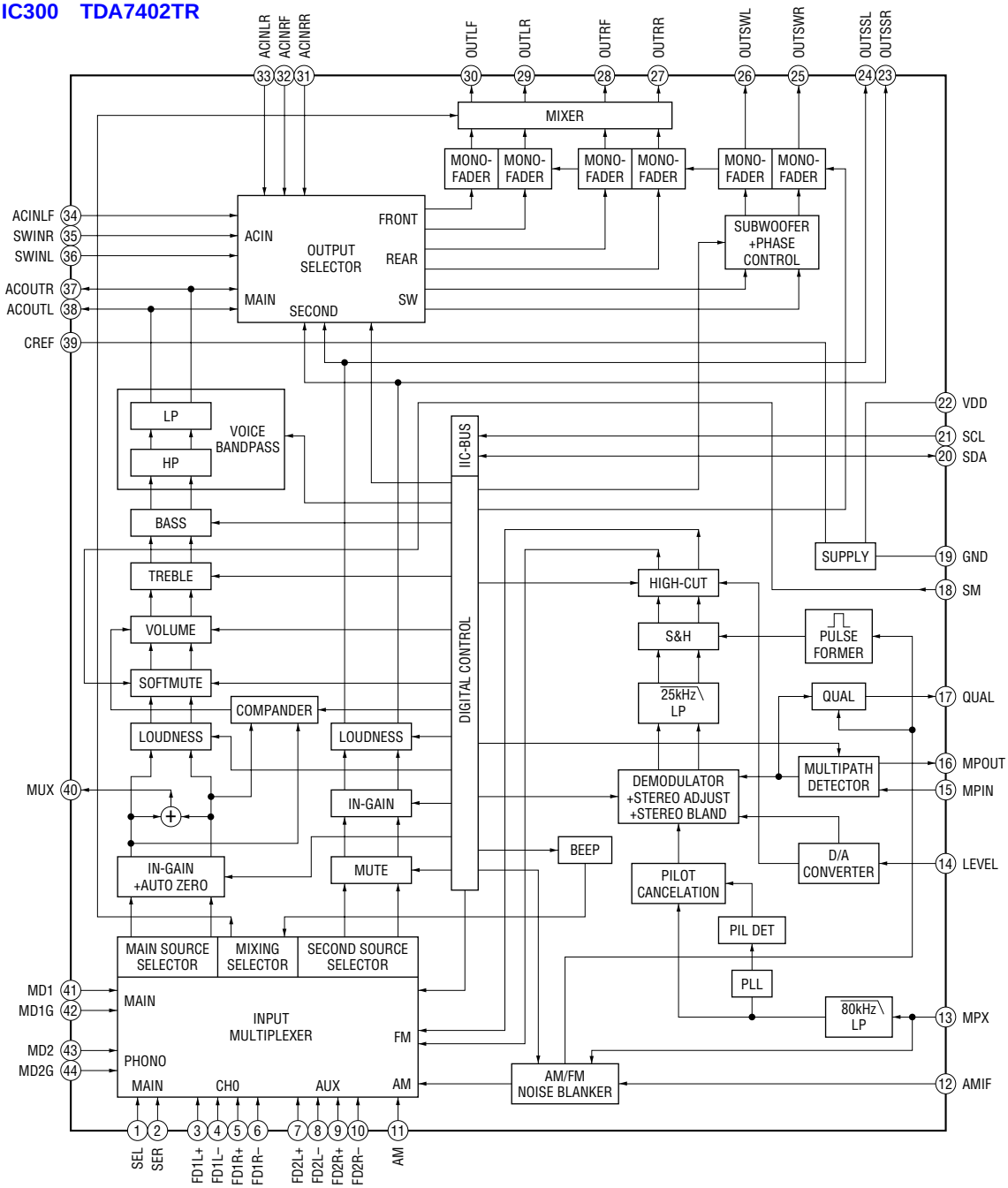



## IC307 MSM51V4400E-70TS-K

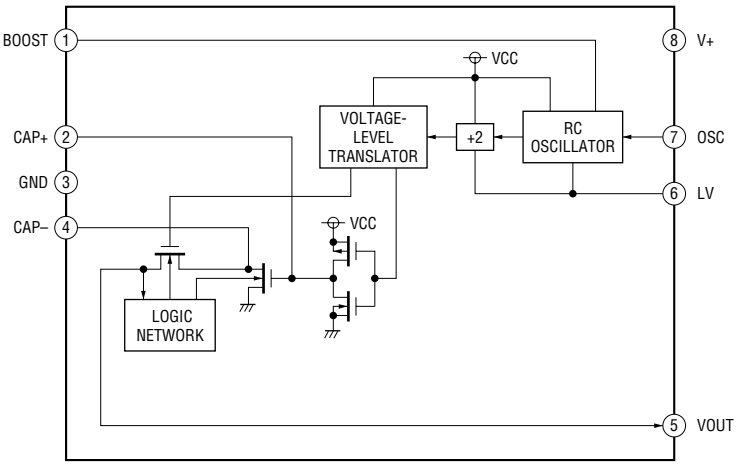


**– MAIN Board –**

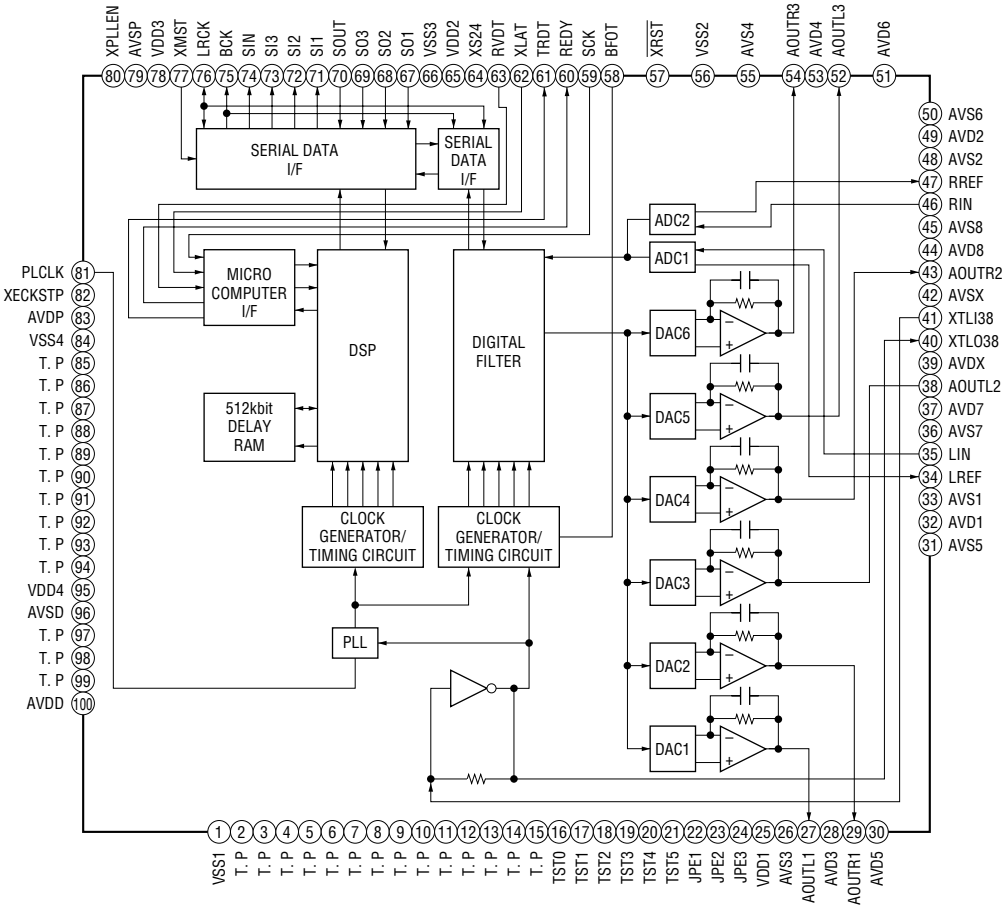
## IC300 TDA7402TR



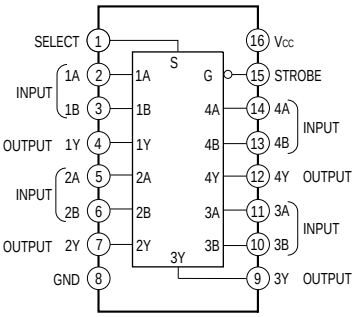

## IC302 TC7660SEOA713



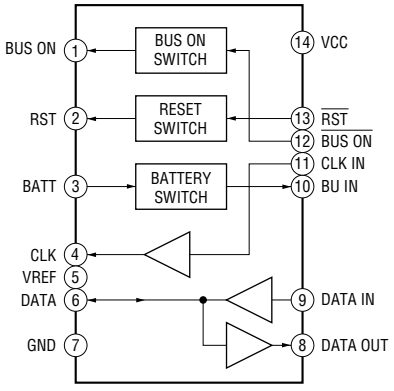
## IC500 CXD2727Q



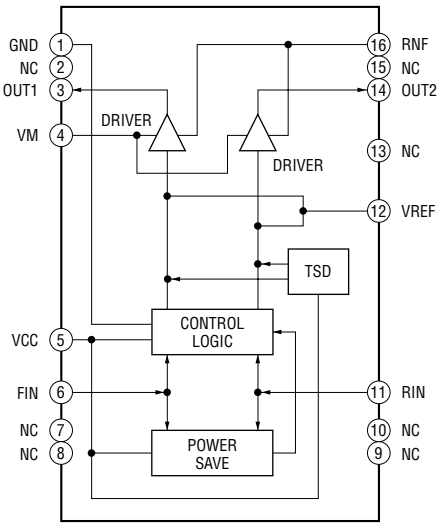

## IC504 TC74VHC157FT (EL)




## IC630 BA8270F-E2

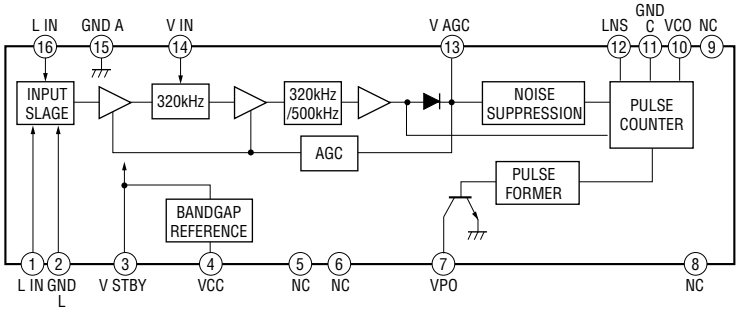



## IC641 BA6288FS-E2

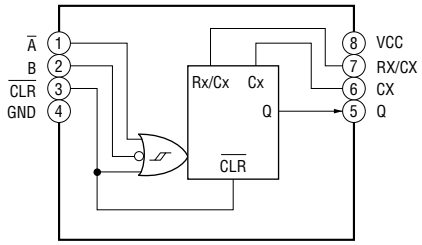


**– DISPLAY Board –**

**IC780 RRX9000-0601#1**

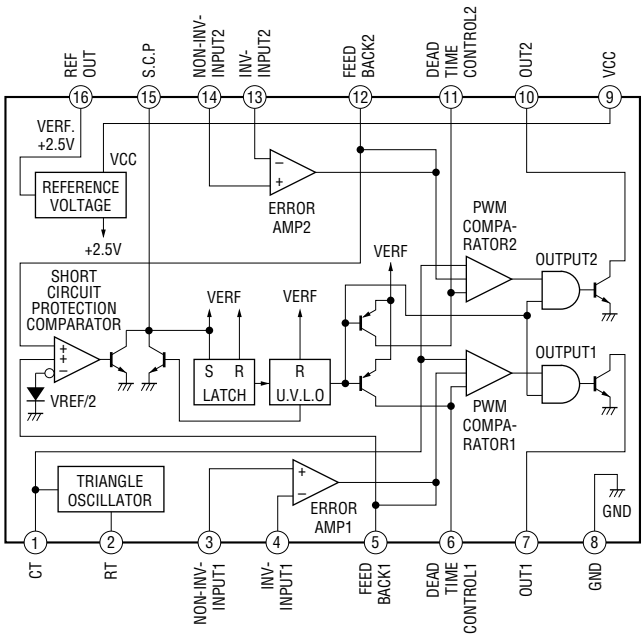



**IC791 TC7WH123FU (TE12R)**




**– POWER Board –**

**IC400, 401 TL1451ACDB-E20**



## 5-29. IC PIN FUNCTION DESCRIPTION

- **SERVO (MD) BOARD IC301 CXD2662R**
  **(DIGITAL SIGNAL PROCESSOR, DIGITAL SERVO SIGNAL PROCESSOR, EFM/ACIRC ENCODER/DECODER, SHOCK PROOF MEMORY CONTROLLER, ATRAC ENCODER/DECODER)**

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | MNT0 (FOK) | O | Focus OK signal output to the MD mechanism controller<br>"H" is output when focus is on ("L": NG) |
| 2 | MNT1 (SHOCK) | O | Track jump detection signal output to the MD mechanism controller |
| 3 | MNT2 (XBUSY) | O | Busy monitor signal output to the MD mechanism controller |
| 4 | MNT3 (SLOCK) | O | Spindle servo lock status monitor signal output to the MD mechanism controller |
| 5 | SWDT | I | Writing serial data signal input from the MD mechanism controller |
| 6 | SCLK | I (S) | Serial data transfer clock signal input from the MD mechanism controller |
| 7 | XLAT | I (S) | Serial data latch pulse signal input from the MD mechanism controller |
| 8 | SRDT | O (3) | Reading serial data signal output to the MD mechanism controller |
| 9 | SENS | O (3) | Internal status (SENSE) output to the MD mechanism controller |
| 10 | XRST | I (S) | Reset signal input from the MD mechanism controller "L": reset |
| 11 | SQSY | O | Subcode Q sync (SCOR) output to the MD mechanism controller<br>"L" is output every 13.3 msec Almost all, "H" is output |
| 12 | DQSY | O | Digital In U-bit CD format subcode Q sync (SCOR) output terminal<br>"L" is output every 13.3 msec Almost all, "H" is output Not used |
| 13 | RECP | I | Laser power selection signal input terminal<br>"L": playback mode, "H": recording mode (fixed at "L" in this set) |
| 14 | XINT | O | Interrupt status output to the MD mechanism controller |
| 15 | TX | O | Recording data output enable signal input terminal<br>Writing data transmission timing input (Also serves as the magnetic head on/off output)<br>Not used |
| 16 | OSCI | I | System clock signal (512Fs=22.5792 MHz) input from the CXD2727Q |
| 17 | OSCO | O | System clock signal (512Fs=22.5792 MHz) output terminal Not used |
| 18 | XTSL | I | Input terminal for the system clock frequency setting<br>"L": 22.5792 MHz, "H": 45.1584 MHz (fixed at "L" in this set) |
| 19 | DIN0 | I | Digital audio signal input terminal when recording mode Not used |
| 20 | DIN1 | I | Digital audio signal input terminal when recording mode Not used |
| 21 | DOUT | O | Digital audio signal output terminal when playback mode Not used |
| 22 | DATAI | I | Recording data input terminal Not used |
| 23 | LRCKI | I | L/R sampling clock signal (44.1 kHz) input terminal Not used |
| 24 | XBCKI | I | Bit clock signal (2.8224 MHz) input terminal Not used |
| 25 | ADDT | I | Recording data input terminal Not used |
| 26 | DADT | O | Playback data output to the CXD2727Q |
| 27 | LRCK | O | L/R sampling clock signal (44.1 kHz) output to the CXD2727Q |
| 28 | XBCK | O | Bit clock signal (2.8224 MHz) output to the CXD2727Q |
| 29 | FS256 | O | Clock signal (11.2896 MHz) output to the CXD2727Q |
| 30 | DVDD | — | Power supply terminal (+3.3V) (digital system) |
| 31 to 34 | A03 to A00 | O | Address signal output to the D-RAM |
| 35 | A10 | O | Address signal output to the external D-RAM Not used |
| 36 to 40 | A04 to A08 | O | Address signal output to the D-RAM |
| 41 | A11 | O | Address signal output to the external D-RAM Not used |
| 42 | DVSS | — | Ground terminal (digital system) |
| 43 | XOE | O | Output enable signal output to the D-RAM "L" active |
| 44 | XCAS | O | Column address strobe signal output to the D-RAM "L" active |
| 45 | A09 | O | Address signal output to the D-RAM |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 46 | XRAS | O | Row address strobe signal output to the D-RAM "L" active |
| 47 | XWE | O | Write enable signal output to the D-RAM "L" active |
| 48 | D1 | I/O | Two-way data bus with the D-RAM (IC307) |
| 49 | D0 | I/O | |
| 50 | D2 | I/O | |
| 51 | D3 | I/O | |
| 52 | MVCI | I | Digital in PLL oscillation input from the external VCO Not used |
| 53 | ASYO | O | Playback EFM full-swing output terminal |
| 54 | ASYI | I (A) | Playback EFM asymmetry comparator voltage input terminal |
| 55 | AVDD | — | Power supply terminal (+3.3V) (analog system) |
| 56 | BIAS | I (A) | Playback EFM asymmetry circuit constant current input terminal |
| 57 | RFI | I (A) | Playback EFM RF signal input from the CXA2523AR |
| 58 | AVSS | — | Ground terminal (analog system) |
| 59 | PCO | O (3) | Phase comparison output for master clock of the recording/playback EFM master PLL |
| 60 | FILI | I (A) | Filter input for master clock of the recording/playback master PLL |
| 61 | FILO | O (A) | Filter output for master clock of the recording/playback master PLL |
| 62 | CLTV | I (A) | Internal VCO control voltage input of the recording/playback master PLL |
| 63 | PEAK | I (A) | Light amount signal (RF/ABCD) peak hold input from the CXA2523AR |
| 64 | BOTM | I (A) | Light amount signal (RF/ABCD) bottom hold input from the CXA2523AR |
| 65 | ABCD | I (A) | Light amount signal (ABCD) input from the CXA2523AR |
| 66 | FE | I (A) | Focus error signal input from the CXA2523AR |
| 67 | AUX1 | I (A) | Auxiliary signal (I3 signal/temperature signal) input from the CXA2523AR |
| 68 | VC | I (A) | Middle point voltage (+1.65V) input from the CXA2523AR |
| 69 | ADIO | O (A) | Monitor output of the A/D converter input signal Not used |
| 70 | AVDD | — | Power supply terminal (+3.3V) (analog system) |
| 71 | ADRT | I (A) | A/D converter operational range upper limit voltage input terminal (fixed at "H" in this set) |
| 72 | ADRB | I (A) | A/D converter operational range lower limit voltage input terminal (fixed at "L" in this set) |
| 73 | AVSS | — | Ground terminal (analog system) |
| 74 | SE | I (A) | Sled error signal input from the CXA2523AR |
| 75 | TE | I (A) | Tracking error signal input from the CXA2523AR |
| 76 | DCHG | I (A) | Connected to the +3.3V power supply |
| 77 | APC | I (A) | Error signal input for the laser automatic power control Not used |
| 78 | ADFG | I | ADIP duplex FM signal (22.05 kHz ± 1 kHz) input from the CXA2523AR |
| 79 | F0CNT | O | Filter f0 control signal output terminal Not used |
| 80 | XLRF | O | Serial data latch pulse signal output terminal Not used |
| 81 | CKRF | O | Serial data transfer clock signal output terminal Not used |
| 82 | DTRF | O | Writing serial data output terminal Not used |
| 83 | APCREF | O | Control signal output to the reference voltage generator circuit for the laser automatic power control |
| 84 | LDDR | O | PWM signal output for the laser automatic power control Not used |
| 85 | TRDR | O | Tracking servo drive PWM signal (–) output to the BH6518FS |
| 86 | TFDR | O | Tracking servo drive PWM signal (+) output to the BH6518FS |
| 87 | DVDD | — | Power supply terminal (+3.3V) (digital system) |
| 88 | FFDR | O | Focus servo drive PWM signal (+) output to the BH6518FS |
| 89 | FRDR | O | Focus servo drive PWM signal (–) output to the BH6518FS |
| 90 | FS4 | O | Clock signal (176.4 kHz) output terminal (X'tal system) Not used |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 91 | SRDR | O | Sled servo drive PWM signal (–) output to the BH6518FS |
| 92 | SFDR | O | Sled servo drive PWM signal (+) output to the BH6518FS |
| 93 | SPRD | O | Spindle servo drive PWM signal (–) output to the BH6518FS |
| 94 | SPFD | O | Spindle servo drive PWM signal (+) output to the BH6518FS |
| 95 | FGIN | I | Not used |
| 96 | TEST1 | I | Input terminal for the test (fixed at “L”) |
| 97 | TEST2 | I | |
| 98 | TEST3 | I | |
| 99 | DVSS | — | Ground terminal (digital system) |
| 100 | EFMO | O | EFM signal output terminal when recording mode Not used |

* I (S) stands for schmitt input, I (A) for analog input, O (3) for 3-state output, and O (A) for analog output in the column I/O.

• **SERVO (MD) BOARD IC302 CXA2523AR (RF AMP, FOCUS/TRACKING ERROR AMP)**

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | I | I | I-V converted RF signal I input from the optical pick-up block detector |
| 2 | J | I | I-V converted RF signal J input from the optical pick-up block detector |
| 3 | VC | O | Middle point voltage (+1.65V) generation output terminal |
| 4 to 9 | A to F | I | Signal input from the optical pick-up detector |
| 10 | PD | I | Light amount monitor input from the optical pick-up block laser diode |
| 11 | APC | O | Laser amplifier output terminal to the automatic power control circuit |
| 12 | APCREF | I | Reference voltage input terminal for setting laser power |
| 13 | GND | — | Ground terminal |
| 14 | TEMPI | I | Connected to the temperature sensor Not used |
| 15 | TEMPR | O | Output terminal for a temperature sensor reference voltage Not used |
| 16 | SWDT | I | Writing serial data input from the MD mechanism controller |
| 17 | SCLK | I | Serial data transfer clock signal input from the MD mechanism controller |
| 18 | XLAT | I | Serial data latch pulse signal input from the MD mechanism controller |
| 19 | XSTBY | I | Standby signal input terminal “L”: standby (fixed at “H” in this set) |
| 20 | F0CNT | I | Center frequency control voltage input terminal of internal circuit (BPF22, BPF3T, EQ) input terminal |
| 21 | VREF | O | Reference voltage output terminal Not used |
| 22 | EQADJ | I | Center frequency setting terminal for the internal circuit (EQ) |
| 23 | 3TADJ | I | Center frequency setting terminal for the internal circuit (BPF3T) |
| 24 | VCC | — | Power supply terminal (+3.3V) |
| 25 | WBLADJ | I | Center frequency setting terminal for the internal circuit (BPF22) |
| 26 | TE | O | Tracking error signal output to the CXD2662R |
| 27 | CSLED | I | Connected to the external capacitor for low-pass filter of the sled error signal |
| 28 | SE | O | Sled error signal output to the CXD2662R |
| 29 | ADFM | O | FM signal output of the ADIP |
| 30 | ADIN | I | Receives a ADIP FM signal in AC coupling |
| 31 | ADAGC | I | Connected to the external capacitor for ADIP AGC |
| 32 | ADFG | O | ADIP duplex signal (22.05 kHz ± 1 kHz) output to the CXD2662R |
| 33 | AUX | O | Auxiliary signal (I3 signal/temperature signal) output terminal Not used |
| 34 | FE | O | Focus error signal output to the CXD2662R |
| 35 | ABCD | O | Light amount signal (ABCD) output to the CXD2662R |
| 36 | BOTM | O | Light amount signal (RF/ABCD) bottom hold output to the CXD2662R |
| 37 | PEAK | O | Light amount signal (RF/ABCD) peak hold output to the CXD2662R |
| 38 | RF | O | Playback EFM RF signal output to the CXD2662R |
| 39 | RFAGC | I | Connected to the external capacitor for RF auto gain control circuit |
| 40 | AGCI | I | Receives a RF signal in AC coupling |
| 41 | COMPO | O | User comparator output terminal Not used |
| 42 | COMPP | I | User comparator input terminal Not used |
| 43 | ADDC | I | Connected to the external capacitor for cutting the low band of the ADIP amplifier |
| 44 | OPO | O | User operational amplifier output terminal Not used |
| 45 | OPN | I | User operational amplifier inversion input terminal Not used |
| 46 | RFO | O | RF signal output |
| 47 | MORFI | I | Receives a MO RF signal in AC coupling |
| 48 | MORFO | O | MO RF signal output |

• **SERVO (MD) BOARD IC501 CXP84340-225Q (MD MECHANISM CONTROLLER)**

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 to 5 | TIN3 to TIN7 | I/O | Input of the 4x8 matrix test keys (“L” is always output, except in test mode) Not used |
| 6 | LOAD | O | MD loading motor control signal (loading direction) output to the MD mechanism deck section motor driver “H” active *1 |
| 7 | EJECT | O | MD loading motor control signal (eject direction) output to the MD mechanism deck section motor driver “H” active *1 |
| 8, 9 | NCO | O | Not used |
| 10 | MDM-ON | O | Power supply on/off control signal output of the MD mechanism deck section main power supply and loading motor drive power supply “H”: power on |
| 11 | $\overline{\text{E-SW}}$ | I | Inputs a MD disc loading completion detect switch detection signal<br>“L”: When completed of a disc loading operation |
| 12 | AG-OK | O | Output terminal of monitor in aging mode “L”: under aging, “H”: aging completed Not used |
| 13 | ADJ-OK | O | Output terminal of monitor when auto adjustment completed<br>“L”: aging NG, “H”: aging OK Not used |
| 14 to 17 | NCO | O | Not used |
| 18 | DFCTSEL | I | Setting terminal for defect function<br>“L”: used this function , “H”: not used this function (fixed at “H” in this set) |
| 19 | DPLLSEL | I | Setting terminal for double PLL function<br>“L”: used this function , “H”: not used this function (fixed at “H” in this set) |
| 20 | EMPHSEL | I | Setting terminal for emphasis signal output<br>“L”: used this function , “H”: not used this function (fixed at “H” in this set) |
| 21 | OPEN REQ | O | Front panel open/close request signal output terminal Not used |
| 22 | NCO | O | Not used |
| 23 | 2M/$\overline{\text{4M}}$ | I | Setting terminal for D-RAM capacitance 2M bit or 4M bit “L”: 4M bit (external D-RAM), “H”: 2M bit (internal D-RAM of CXD2662R) (fixed at “L” in this set) |
| 24, 25 | NCO | O | Not used |
| 26 | MNT0 | I | Focus OK signal input from the CXD2662R “H” is input when focus is on (“L”: NG) |
| 27 | MNT1 | I | Track jump detection signal input from the CXD2662R |
| 28 | MNT2 | I | Busy monitor signal input from the CXD2662R |
| 29 | MNT3 | I | Spindle servo lock status monitor signal input from the CXD2662R |
| 30 | $\overline{\text{RESET}}$ | I | System reset signal input from the master controller, reset signal generator and reset switch<br>“L”: reset<br>For several hundreds msec. after the power supply rises, “L” is input, then it changes to “H” |
| 31 | TX | O | Sub system clock output terminal (32.768 kHz) Not used |
| 32 | TEX | I | Sub system clock input terminal (32.768 kHz) Not used |
| 33 | VSS | — | Ground terminal |
| 34 | EXTAL | O | Main system clock output terminal (10 MHz) |
| 35 | XTAL | I | Main system clock input terminal (10 MHz) |
| 36 | AVSS | — | Ground terminal (for analog system) |
| 37 | AVREF | I | Reference voltage input terminal (+5V) (for A/D converter) |
| 38 | INIT | I | Initial reset signal input terminal (A/D input) (fixed at “H”) |
| 39 | TEMP | I | Temperature sensor connect terminal (A/D input) |
| 40 | ACNT | I | Setting terminal for the number of load/eject aging times (A/D input) 00h – 54h (30 times), 55h – A9h (20 times), AAh – FFh (10 times) (fixed at “L” in this set) |
| 41 | DO-SEL | I | Setting terminal for the digital output bits (A/D input) |
| 42 | EE-CS | O | Chip select signal output to the external EEPROM device Not used |
| 43 | EE-CKO | O | Serial data transfer clock signal output to the external EEPROM device Not used |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 44 | EE-SIO | I/O | Two way data bus with the external EEPROM device Not used |
| 45 | MD-SO | O | Writing serial data signal output to the CXD2662R and CXA2523AR |
| 46 | LINKOFF | O | Unilink on/off control signal output for the SONY bus interface "L": link on, "H": link off<br>Not used |
| 47 | UNIREQ | O | Data request signal output terminal (for SONY bus) "H": request on Not used |
| 48 | UNICKIO | I/O | Serial clock signal input from the master controller |
| 49 | UNISI | I | Serial data input from the SONY bus interface |
| 50 | UNISO | O | Serial data output to the SONY bus interface |
| 51 | MD-CKO | O | Serial data transfer clock signal output to the CXD2662R and CXA2523AR |
| 52 | MD-SI | I | Reading serial data signal input from the CXD2662R |
| 53 | NCO | O | Not used |
| 54 | SENS | I | Internal status (SENSE) input from the CXD2662R |
| 55 | CC-XINT | I | Interrupt status input from the CXD2662R |
| 56 | $\overline{\text{LIMIT-IN}}$ | I | Detection input from the MD sled limit-in detect switch<br>The optical pick-up is inner position when "L" |
| 57 | EJT-KEY | I | Front panel status signal input terminal "H": front panel full open Not used |
| 58 | ERROR-PWM | O | PWM error monitor output terminal (C1error rate and ATER is output when test mode)<br>Not used |
| 59 | $\overline{\text{MD-RST}}$ | O | Reset signal output to the CXD2662R and BH6518FS "L": reset |
| 60 | BU-IN | I | Back-up power supply detect signal input from the SONY bus interface<br>"L" is input at low voltage |
| 61 | $\overline{\text{BUS-ON}}$ | I | SONY bus on/off control signal input from the master controller "L": bus on |
| 62 | SQSY | I | Subcode Q sync (SCOR) input from the CXD2662R<br>"L" is input every 13.3 msec Almost all, "H" is input |
| 63 | $\overline{\text{C-SW}}$ | I | Inputs a MD disc loading start or a MD disc eject completion detect switch detection signal<br>"L": When loading start or eject completed of a disc loading operation |
| 64 | MD-LAT | O | Serial data latch pulse signal output to the CXD2662R and CXA2523AR |
| 65 | MD-ON | O | Power supply on/off control signal output of the MD mechanism deck section main power supply<br>"H": power on |
| 66 | DEEMP | O | MD emphasis control signal output to the master controller "H": emphasis on |
| 67 | A-ATT | O | Audio line muting on/off control signal output "H": muting on |
| 68 | NCO | O | Not used |
| 69 | TSTCKO | O | Output of clock signal for the test mode display Not used |
| 70 | TSTSO | O | Output of data for the test mode display Not used |
| 71 | $\overline{\text{TSTMOD}}$ | I | Setting terminal for the test mode "L": test mode, "H": normal mode |
| 72 | VDD | — | Power supply terminal (+5V) |
| 73 | NIL | I | Not used |
| 74 to 77 | TOUT0 to TOUT3 | O | In test mode, output of the 4x8 matrix test keys Not used |
| 78 to 80 | TIN0 to TIN2 | I/O | In test mode, input of the 4x8 matrix test key In nomal mode, output "L" Not used |

*1 Loading motor (M903) control

| Operation / Terminal | STOP | LODING | EJECT | BRAKE |
|---|---|---|---|---|
| LOAD (pin ⑥) | "L" | "H" | "L" | "H" |
| EJECT (pin ⑦) | "L" | "L" | "H" | "H" |

• **MAIN BOARD IC500 CXD2727Q (DIGITAL SIGNAL PROCESSOR, DIGITAL FILTER, D/A CONVERTER)**

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | VSS1 | — | Ground terminal (digital system) |
| 2 to 15 | T.P | I | Input terminal for the test (fixed at “L”) |
| 16 to 21 | TST0 to TST5 | I | Input terminal for the test (fixed at “L”) |
| 22 to 24 | JPE1 to JPE3 | I | External condition jump terminal “H”: condition jump (fixed at “L” in this set) |
| 25 | VDD1 | — | Power supply terminal (+3.3V) (digital system) |
| 26 | AVS3 | — | Ground terminal (for D/A converter 1) (analog system) |
| 27 | AOUTL1 | O | D/A converter 1 (L-ch side) output terminal<br>Analog signal output for front side (L-ch side) output in this set |
| 28 | AVD3 | — | Power supply terminal (+3.3V) (for D/A converter 1) (analog system) |
| 29 | AOUTR1 | O | D/A converter 1 (R-ch side) output terminal<br>Analog signal output for rear side (L-ch side) output in this set |
| 30 | AVD5 | — | Power supply terminal (+3.3V) (for D/A converter 1) (analog system) |
| 31 | AVS5 | — | Ground terminal (for D/A converter 1) (analog system) |
| 32 | AVD1 | — | Power supply terminal (+3.3V) (for L-ch side A/D converter) (analog system) |
| 33 | AVS1 | — | Ground terminal (for L-ch side A/D converter) (analog system) |
| 34 | LREF | O | Connected to the bus control for A/D converter (for L-ch side) |
| 35 | LIN | I | A/D converter (L-ch side) analog input terminal<br>Tuner, bus audio input signal and extarnal audio input signal (L-ch side) are input in this set |
| 36 | AVS7 | — | Ground terminal (for D/A converter 2) (analog system) |
| 37 | AVD7 | — | Power supply terminal (+3.3V) (for D/A converter 2) (analog system) |
| 38 | AOUTL2 | O | D/A converter 2 (L-ch side) output terminal Not used |
| 39 | AVDX | — | Power supply terminal (+3.3V) (for master clock) (analog system) |
| 40 | XTLO38 | O | System clock output terminal (16.9344 MHz) |
| 41 | XTLI38 | I | System clock input terminal (16.9344 MHz) |
| 42 | AVSX | — | Ground terminal (for master clock) (analog system) |
| 43 | AOUTR2 | O | D/A converter 2 (R-ch side) output terminal<br>Analog signal output for sub woofer output in this set |
| 44 | AVD8 | — | Power supply terminal (+3.3V) (for D/A converter 2) (analog system) |
| 45 | AVS8 | — | Ground terminal (for D/A converter 2) (analog system) |
| 46 | RIN | I | A/D converter (R-ch side) analog input terminal<br>Tuner, bus audio input signal and extarnal audio input signal (R-ch side) are input in this set |
| 47 | RREF | O | Connected to the bus control for A/D converter (for R-ch side) |
| 48 | AVS2 | — | Ground terminal (for R-ch side A/D converter) (analog system) |
| 49 | AVD2 | — | Power supply terminal (+3.3V) (for R-ch side A/D converter) (analog system) |
| 50 | AVS6 | — | Ground terminal (for D/A converter 3) (analog system) |
| 51 | AVD6 | — | Power supply terminal (+3.3V) (for D/A converter 3) (analog system) |
| 52 | AOUTL3 | O | D/A converter 3 (L-ch side) output terminal<br>Analog signal output for rear side (R-ch side) output in this set |
| 53 | AVD4 | — | Power supply terminal (+3.3V) (for D/A converter 3) (analog system) |
| 54 | AOUTR3 | O | D/A converter 3 (R-ch side) output terminal<br>Analog signal output for front side (R-ch side) output in this set |
| 55 | AVS4 | — | Ground terminal (for D/A converter 3) (analog system) |
| 56 | VSS2 | — | Ground terminal (digital system) |
| 57 | $\overline{\text{XRST}}$ | I | System reset signal input from the master controller “L”: reset |
| 58 | BFOT | O | Master clock signal output terminal Used for CD master clock in this set |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 59 | SCK | I | Serial data transfer clock signal input from the master controller for the micro controller interface |
| 60 | REDY | O | Transfer enable signal output for micro controller interface to the master controller<br>“L”: transfer prohibition |
| 61 | TRDT | O | Serial data output to the master controller and liquid crystal display controller |
| 62 | XLAT | I | Serial data latch pulse input from the master controller |
| 63 | RVDT | I | Serial data input from the master controller |
| 64 | XS24 | I | Serial data 24/32 bit slot selection signal input from the master controller<br>“L”: 24 bit slot, “H”: 32 bit slot |
| 65 | VDD2 | — | Power supply terminal (+3.3V) (digital system) |
| 66 | VSS3 | — | Ground terminal (digital system) |
| 67 to 69 | SO1 to SO3 | O | Serial data output terminal  Not used |
| 70 | SOUT | O | Serial data output terminal  Not used |
| 71 | SI1 | I | CD or MD digital audio signal input terminal |
| 72, 73 | SI2, SI3 | I | Serial data input terminal  Not used |
| 74 | SIN | I | Serial data input terminal  Not used |
| 75 | BCK | I | Serial bit transfer clock signal input terminal for CD or MD digital audio signal |
| 76 | LRCK | I | Sampling frequency clock signal input terminal for CD or MD digital audio signal |
| 77 | XMST | I | Bit clock (BCK) and L/R sampling clock (LRCK) signal master/slave mode selection signal input from the master controller  “L”: master mode, “H”: slave mode |
| 78 | VDD3 | — | Power supply terminal (+3.3V) (digital system) |
| 79 | AVSP | — | Ground terminal (PLL system) |
| 80 | XPLLEN | I | PLL enable signal input terminal  Normally: fixed at “L” |
| 81 | PLCLK | O | PLL clock signal output terminal (22.5792 MHz) for MD master clock |
| 82 | XECKSTP | I | MD PLL clock output control signal input from the master controller<br>At “L” is input: PLCKL (pin ⑧①) is fixed at “L”<br>At “H” is input: PLCKL (pin ⑧①) output the PLL clock signal |
| 83 | AVDP | — | Power supply terminal (+3.3V) (PLL system) |
| 84 | VSS4 | — | Ground terminal (digital system) |
| 85 to 94 | T.P | I | Input terminal for the test  Normally: fixed at “L” |
| 95 | VDD4 | — | Power supply terminal (+3.3V) (digital system) |
| 96 | AVSD | — | Ground terminal (for D-RAM) |
| 97 to 99 | T.P | I | Input terminal for the test  Normally: fixed at “L” |
| 100 | AVDD | — | Power supply terminal (+3.3V) (for D-RAM) |

• **MAIN BOARD IC550 MB90574CPMT-G-382-BNDE1**

**(MASTER CONTROLLER (CD MECHANISM CONTROLLER) )**

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | SP LATCH | O | Serial data latch pulse output for spectrum analyzer display to the displayr controller<br>"H" active |
| 2 | DSPON | O | Power on/off control signal output for the CXD2727Q power supply "H": power on |
| 3 | DSPLAT | O | Serial data latch pulse output to the CXD2727Q |
| 4 | $\overline{\text{DSPRST}}$ | O | System reset signal output to the CXD2727Q "L": reset |
| 5 | ATT | O | Audio line muting on/off control signal output "H": muting on |
| 6 | $\overline{\text{SYSRST}}$ | O | System reset signal output to the MD mechanism controller, SONY bus interface IC and display controller "L": reset |
| 7 | D AUDSEL | O | CD/MD selection signal output to the CD/MD selector "L": CD, "H": MD<br>Serial data 24/32 bit slot selection signal output to the CXD2727Q<br>"L": 24 bit slot, "H": 32 bit slot |
| 8 | VCC | — | Power supply terminal (+5V) |
| 9 | NCO | O | Not used |
| 10 | EE SIO | I/O | Two-way data bus with the EEPROM on the tuner unit |
| 11 | EE CKO | O | Clock signal output to the EEPROM on the tuner unit |
| 12 | RX | I | Input terminal for UART transfer data when writing into flash memory data |
| 13 | TX | O | Output terminal for UART transfer data when writing into flash memory data |
| 14 | $\overline{\text{BUSON}}$ | O | Bus on/off control signal output for SONY bus to the MD mechanism controller, SONY bus interface IC and display controller "L": bus on |
| 15 | BEEP | O | Beep sound drive signal output terminal "H": beep on |
| 16 | TELMUTE | I | Telephone muting detect signal input terminal<br>At input of "H", the audio signal is attenuated by 20 dB |
| 17 | UNISI | I | Serial data input from the SONY bus interface IC |
| 18 | UNISO | O | Serial data output to the SONY bus interface IC |
| 19 | UNICKO | O | Serial clock signal output for the bus interface to the MD mechanism controller, SONY bus interface IC and display controller |
| 20 | DSPSI | I | Serial data input from the CXD2727Q |
| 21 | DSPSO | O | Serial data output to the CXD2727Q |
| 22 | DSPCKO | O | Serial data transfer clock signal output to the CXD2727Q and display controller |
| 23 | NCO | O | Not used |
| 24 | SIRCS | I | SIRCS signal input from the SIRCS controller |
| 25 | CD SI/TSI | I | Serial data input from the uPD63711GC |
| 26 | CD SO/TSO | O | Serial data output to the uPD63711GC |
| 27 | CD CKO/TCKO | O | Serial data transfer clock signal output to the uPD63711GC |
| 28 | DSPPLL | O | MD PLL clock output control signal output to the CXD2727Q<br>At "L" is output: PLCKL (pin ⑧①) is fixed at "L"<br>At "H" is output: PLCKL (pin ⑧①) output the PLL clock signal |
| 29 | DSPMST | O | Power on/off controll signal output for the CD/MD selector<br>"L": power off (tuner on), "H": power on (CD/MD on)<br>Bit clock (BCK) and L/R sampling clock (LRCK) signal master/slave mode selection signal output to the CXD2727Q "L": master mode, "H": slave mode |
| 30 | NCO | O | Not used |
| 31 | $\overline{\text{VOLATT}}$ | O | Muting on/off control signal output to the TDA7402TR "L": muting on |
| 32 | $\overline{\text{DIVER}}$ | O | Diversity selection signal output terminal Not used |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 33 | VSS | — | Ground terminal |
| 34 | C | — | Connected to coupling capacitor for the power supply |
| 35 | CD XRST | O | System reset signal output to the uPD63711GC "L": reset |
| 36 | CD A0 | O | Command/parameter recognition selection signal output to the uPD63711GC<br>"L": command transmission, "H": parameter transmission |
| 37 | CD STB | O | Data strobe signal output to the uPD63711GC |
| 38 | DVCC | — | Power supply terminal (+5V) (for D/A converter) |
| 39 | DVSS | — | Ground terminal (for D/A converter) |
| 40 | FP CTRL | O | Front panel open/close motor speed control signal output to the BA6288FS |
| 41 | CD TSTB | O | CD text parameter strobe signal output to the uPD63711GC |
| 42 | AVCC | — | Power supply terminal (+5V) (for A/D converter) |
| 43 | AVRH | I | Reference voltage (+5V) input terminal (for A/D converter) |
| 44 | AVRL | I | Reference voltage (0V) input terminal (for A/D converter) |
| 45 | AVSS | — | Ground terminal (for A/D converter) |
| 46, 47 | KEYIN0,<br>KEYIN1 | I | Key input terminal (A/D input) |
| 48 | NCO | O | Not used |
| 49 | $\overline{\text{CD ON}}$ | O | Power on/off control signal output for the CD mechanism deck section "L": power on |
| 50 to 52 | NCO | O | Not used |
| 53 | VSM | I | S meter voltage detect signal input from the tuner unit (A/D input) |
| 54 | VCC | — | Power supply terminal (+5V) |
| 55 | CDM ON | O | Power on/off control signal output for the CD mechanism deck section "H": power on |
| 56 | $\overline{\text{CD XTALEN}}$ | O | Not used |
| 57 | CD LM LO | O | CD loading motor control signal (loading direction) output to the BA5810FP on the CD mechanism deck section "H" active *1 |
| 58 | CD LM EJ | O | CD loading motor control signal (eject direction) output to the BA5810FP on the CD mechanism deck section "H" active *1 |
| 59 | CD RFOK | I | RFOK signal input from the uPD63711GC |
| 60 | CD PH1 | I | Detection input terminal from the disc in detect sensor on the CD mechanism deck section<br>"L" is input when disc is loaded in |
| 61 | CD PH3 | I | Detection input terminal from the loding completion detect sensor on the CD mechanism deck section "L" is input after disc is loaded completely |
| 62 | CD DSW | I | Detection input terminal from the disc set detect switch on the CD mechanism deck section<br>"L" is input when disc is loaded and chuked |
| 63 | VSS | — | Ground terminal |
| 64 | CD PACK | I | CD text pack synchronized signal input from the uPD63711GC |
| 65 | FSW IN | I | Oscillation frequency input for measure against AM beat |
| 66 | CD PH2 | I | Detection input terminal from the CD disc size (8cm/12cm) detect sensor on the CD mechanism deck section "L": 8cm, "H": 12cm |
| 67 | CD SELFSW | I | Detection input terminal from the disc self store detect switch on the CD mechanism deck section<br>"L" is input when disc is loaded in |
| 68 | CD LIMIT | I | CD sled limit in detect switch input terminal<br>"L": When the optical pick-up is inner position |
| 69 | $\overline{\text{FLASH W}}$ | I | Detect signal Input terminal when writing into flash memory data<br>"L" is input when writing mode Not used |
| 70 | I2CSIO | I/O | IIC two-way data bus with the tuner unit and TDA7402TR |
| 71 | I2CCKO | O | IIC bus clock signal output to the tuner unit and TDA7402TR |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 72 | NCO | O | Not used |
| 73 | X1A | O | Sub system clock output terminal (32.768 kHz) |
| 74 | X0A | I | Sub system clock input terminal (32.768 kHz) |
| 75 | FP PULSE | I | Detection input terminal from the front panel open/close detect and open/close angle detect sensor<br>"L" is input when the front panel is full opened |
| 76 | DSPREDY | I | Transfer enable signal input for micro controller interface from the CXD2727Q<br>"L": transfer prohibition |
| 77 | MD ON | I | Power on/off signal input of the MD mechanism deck section from the MD mechanism controller<br>"H": power on |
| 78 | BU IN | I | Back-up power supply detect signal input from the SONY bus interface IC<br>"L" is input at low voltage |
| 79 | KEYACK | I | Input of acknowledge detect signal for the key entry  Acknowledge signal is input to accept function and eject keys in the power off status  On at input of "H" |
| 80 | $\overline{\text{AD ON}}$ | O | A/D converter power control signal output terminal<br>When the KEYACK (pin ⑦⑨) that controls reference voltage power for key A/D conversion input is active, "L" is output from this terminal to enable the input |
| 81 | $\overline{\text{ACC IN}}$ | I | Accessory power detection signal input terminal  "L": accessory power on |
| 82 | $\overline{\text{SIRCS RST}}$ | O | System reset signal output to the SIRCS controller  "L": reset |
| 83 | POWON | O | System power on/off control signal output terminal  "H": power on |
| 84 | $\overline{\text{TESTIN}}$ | I | Setting terminal for the test mode  "L": test mode, normally fixed at "H" |
| 85 | $\overline{\text{RAMBU}}$ | I | Internal RAM reset detection signal input from the RN5VD33AA<br>Input terminal to check that RAM data are not destroyed due to low voltage<br>This checking is made within 100 msec after reset |
| 86 | HSTX | I | Hardware standby signal input terminal  "L": hardware standby mode<br>Reset signal input in this set |
| 87 to 89 | MD2 to MD0 | I | Setting terminal for the CPU operational mode |
| 90 | $\overline{\text{RSTX}}$ | I | System reset signal input from the reset signal generator and reset switch  "L": reset<br>For several hundreds msec. after the power supply rises, "L" is input, then it changes to "H" |
| 91 | VSS | — | Ground terminal |
| 92 | X0 | I | Main system clock input terminal (3.8684 MHz) |
| 93 | X1 | O | Main system clock output terminal (3.8684 MHz) |
| 94 | VCC | — | Power supply terminal (+5V) |
| 95 | $\overline{\text{ILLIN}}$ | I | Auto dimmer control illumination line detection signal input terminal<br>"L" is input at dimmer detection |
| 96 | $\overline{\text{IDET}}$ | I | Detection signal input from the front panel open/close motor over-load detection circuit<br>"L": over current |
| 97 | MOT– | O | Front panel open/close motor drive signal (panel close direction) output to the BA6288FS<br>"H" active  *2 |
| 98 | MOT+ | O | Front panel open/close motor drive signal (panel open direction) output to the BA6288FS<br>"H" active  *2 |
| 99 | $\overline{\text{CLOSE SW}}$ | I | Detection input from the front panel close detect switch  "L": front panel close |
| 100 | $\overline{\text{OPEN SW}}$ | I | Detection input from the front panel open detect switch  "L": front panel full open |
| 101 | $\overline{\text{BOOT}}$ | O | Detection signal outnput at the flash memory writing mode to the display controller<br>"L" is input when writing mode |
| 102 to 104 | NCO | O | Not used |
| 105 | SUBP ON | O | Power on/off control signal output for the sub panel illumination LED  "H": power on |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 106 | WAKEUP | O | Power wake up control signal output terminal for sleep release of the master controller<br>“H”: active |
| 107 to 111 | NCO | O | Not used |
| 112 | 9K/10K | I | Frequency select switch input terminal<br>“L”: AM 10k step/FM 200k step, “H”: AM 9k step/FM 50k step |
| 113 | NCO | O | Not used |
| 114 | FSW SFT | O | control signal output for measure against AM beat to the power control IC |
| 115 | EMPH IN | I | Emphasis control signal input from the uPD63711GC and MD mechanism controller<br>“H”: emphasis on |
| 116 | $\overline{\text{PACK-IN}}$ | I | Detection input terminal from the MD disc insert detect sensor<br>“L”: MD disc is inserting or ejecting |
| 117 | FM ON | O | FM system power on/off control signal output terminal Not used |
| 118 | TUNON | O | Tuner unit power on/off control signal output “H”: tuner power on |
| 119 | VSS | — | Ground terminal |
| 120 | AMPON | O | Standby on/off control signal output to the power amplifier<br>“L”: standby mode, “H”: amplifier on |

*1 CD loading motor (M103) control

| Operation / Terminal | STOP | LODING | SAVE | BRAKE |
|---|---|---|---|---|
| CD LM EJ (pin ⑱) | “L” | “L” | “H” | “H” |
| CD LM LO (pin ⑰) | “L” | “H” | “L” | “H” |

*1 Front panel open/close motor (M640) control

| Operation / Terminal | STOP | FRONT PANEL OPEN | FRONT PANEL CLOSE | BRAKE |
|---|---|---|---|---|
| MOT– (pin ㊼) | “L” | “L” | “H” | “H” |
| MOT+ (pin ㊽) | “L” | “H” | “L” | “H” |

• **MAIN BOARD IC660 RRX9000-0401R#01 (SIRCS CONTROLLER)**

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | VDD | — | Power supply terminal (+3.3V) |
| 2 | VSS | — | Ground terminal |
| 3 | XIN | I | System clock input terminal (4 MHz) |
| 4 | XOUT | O | System clock output terminal (4 MHz) |
| 5 | CNVSS | — | Ground terminal |
| 6 | $\overline{\text{RESET}}$ | I | Reset signal input from the master controller "L": reset |
| 7, 8 | F0, F1 | I/O | Not used |
| 9 | G0/INT | I | SIRCS signal input from the remote control receiver |
| 10 | G1/INT | I/O | Not used |
| 11, 12 | G2, G3 | I/O | Not used |
| 13 to 16 | S3 to S0 | I/O | Not used |
| 17 | D3/K | O | SIRCS signal output to the master controller |
| 18 | D2/C | I/O | Not used |
| 19, 20 | D1, D0 | I/O | Not used |

• **DISPLAY BOARD IC710 HD6432355A45F (DISPLAY CONTROLLER)**

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1, 2 | NCO | O | Not used |
| 3 | VSS | — | Ground terminal |
| 4 | NCO | O | Not used |
| 5 | VCC | — | Power supply terminal (+5V) |
| 6 to 9 | NCO | O | Not used |
| 10 | VSS | — | Ground terminal |
| 11 to 18 | NCO | O | Not used |
| 19 | VSS | — | Ground terminal |
| 20 to 23 | NCO | O | Not used |
| 24 | PEAK RST | O | Peak hold reset signal output to the peak detect IC "H": reset |
| 25 to 27 | NCO | O | Not used |
| 28 | VSS | — | Ground terminal |
| 29 | $\overline{\text{LVL RD}}$ | I | Level reading detect signal input from the sampling timer IC |
| 30 to 32 | NCO | O | Not used |
| 33 | SP-LAT | I | Serial data latch pulse input for spectrum analyzer display from the master controller "H" active |
| 34 | BU IN | I | Back-up power supply detection signal input from the SONY bus interface<br>"L" is input at low voltage |
| 35, 36 | VSS | — | Ground terminal |
| 37 | NCO | O | Not used |
| 38 | $\overline{\text{BUSON}}$ | I | Bus on/off control signal input (for the SONY bus) from the master controller<br>"L": bus on |
| 39 | VCC | — | Power supply terminal (+5V) |
| 40 to 43 | NCO | O | Not used |
| 44 | VSS | — | Ground terminal |
| 45 to 49 | NCO | O | Not used |
| 50 | LINKOFF | O | Uni link on/off control signal output for the SONY bus interface "L": link on, "H": link off |
| 51 | NCO | O | Not used |
| 52 | ILLON | O | Power supply on/off control signal output of the front panel illumination LED "H": power on |
| 53 | VSS | — | Ground terminal |
| 54 to 56 | NCO | O | Not used |
| 57 | $\overline{\text{BOOT}}$ | I | Detect signal input at the flash memory writing mode from the master controller<br>"L" is input when writing mode |
| 58 | VCC | — | Power supply terminal (+5V) |
| 59 | NCO | O | Not used |
| 60 | LCD SO/TX | O | Display serial data output to the liquid crystal display driver IC<br>Output terminal for UART transfer data when writing into internal flash memory data |
| 61 | SP SI | I | Spectrum analyzer display serial data input from the CXD2727Q |
| 62 | RX | I | Input terminal for UART transfer data when writing into internal flash memory data |
| 63 | SP CLK | I | Spectrum analyzer display serial data transfer clock signal input from the master controller |
| 64 | LCD CLK | O | Display serial data transfer clock signal output to the liquid crystal display driver IC |
| 65 | VSS | — | Ground terminal |
| 66 | LCD CE0 | O | Chip enable signal output to the liquid crystal display driver IC |
| 67, 68 | VSS | — | Ground terminal |
| 69 | $\overline{\text{LCD INH}}$ | O | Blank indicate control signal output to the liquid crystal display driver IC |
| 70 | LCD CE1 | O | Chip enable signal output to the liquid crystal display driver IC |

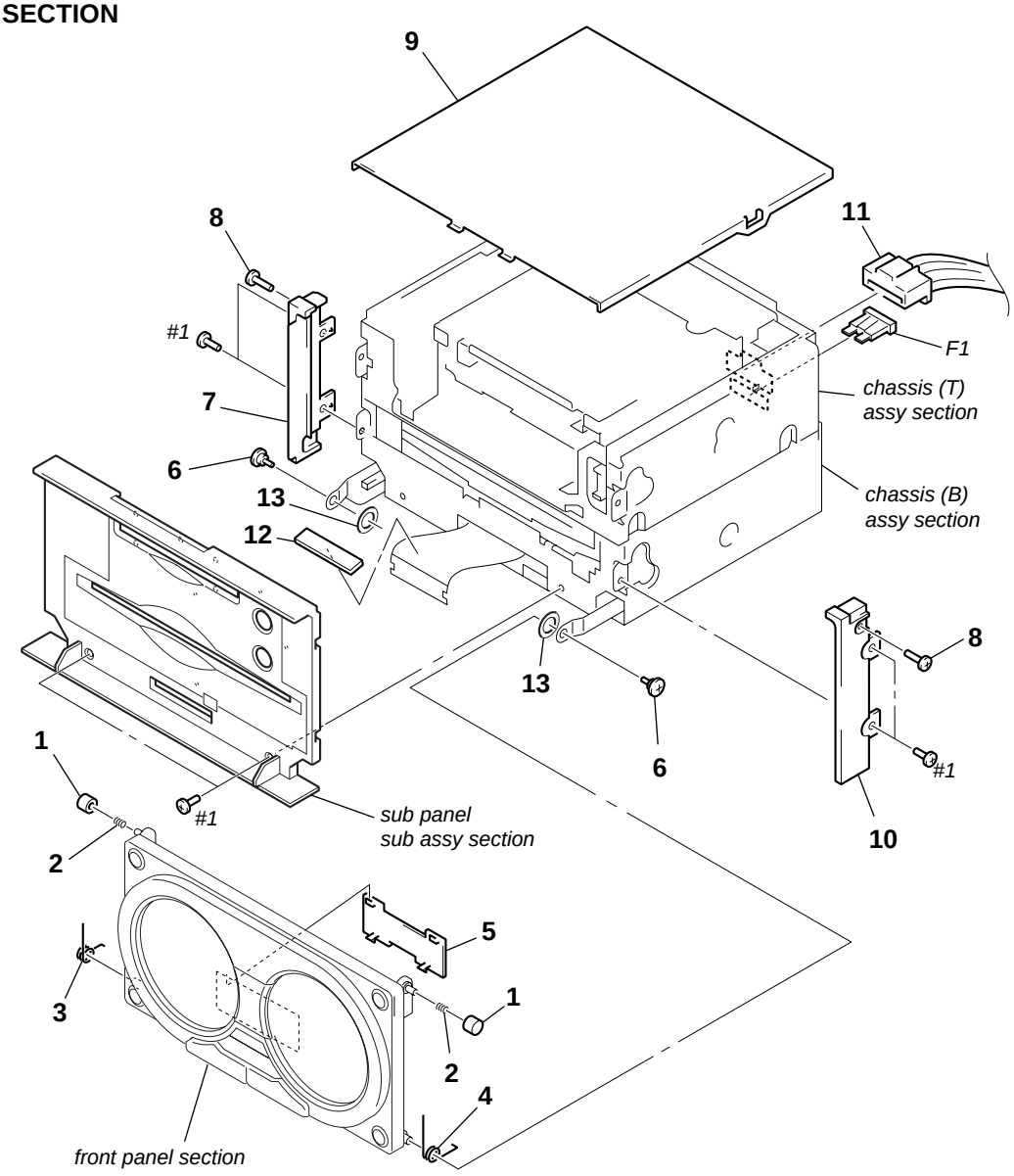
| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 71 to 78 | NCO | O | Not used |
| 79 | FL W | O | Control signal output terminal when writing into internal flash memory data Not used |
| 80 | FWE | I | Enable signal input terminal when writing into internal flash memory data Not used |
| 81 | $\overline{\text{RES}}$ | I | System reset signal input from the master controller, reset signal generator and reset switch<br>"L": reset "L" is input for several 100 msec after power on, then it changes to "H" |
| 82 | NMI | I | Non maskable interrupt input terminal<br>Connect to the back-up power supply detection circuit (BU IN (pin ㉞) ) in this set |
| 83 | $\overline{\text{STBY}}$ | I | Hard ware standby signal input terminal<br>"L": hard ware standby mode (fixed at "H" in this set) |
| 84 | VCC | — | Power supply terminal (+5V) |
| 85 | XTAL | O | System clock output terminal (18.432 MHz) |
| 86 | EXTAL | I | System clock input terminal (18.432 MHz) |
| 87 | VSS | — | Ground terminal |
| 88 | NCO | O | Not used |
| 89 | VCC | — | Power supply terminal (+5V) |
| 90 to 96 | NCO | O | Not used |
| 97 | UNISO | O | Serial data output to the SONY bus interface IC |
| 98 | UNISI | I | Serial data input from the SONY bus interface IC |
| 99, 100 | VSS | — | Ground terminal |
| 101 | UNICKI | I | Serial clock signal input for the bus interface from the master controller |
| 102 | NCO | O | Not used |
| 103 | AVCC | — | Power supply terminal (+5V) (for the A/D converter and D/A converter) |
| 104 | VREF | I | Reference voltage (+5V) input terminal (for the A/D converter and D/A converter) |
| 105 | LVL L | I | Analog signal input for front side (L-ch side) from the CXD2727Q |
| 106 | LVL R | I | Analog signal input for front side (R-ch side) from the CXD2727Q |
| 107 to 112 | NIL | I | Not used |
| 113 | AVSS | — | Ground terminal (for the A/D converter and D/A converter) |
| 114 | VSS | — | Ground terminal |
| 115 to 118 | NCO | O | Not used |
| 119 | PWM CYCLE | O | PWM synchronizing generation output terminal Not used |
| 120 to 122 | PWM B,<br>PWM G,<br>PWM R | O | LCD back light LED drive signal output terminal<br>Color switching by RGB composition |
| 123 to 125 | MD0 to MD2 | I | Setting terminal for the CPU operational mode |
| 126 to 128 | NCO | O | Not used |

# SECTION 6
# EXPLODED VIEWS

NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Accessories are given in the last of the electrical parts list.

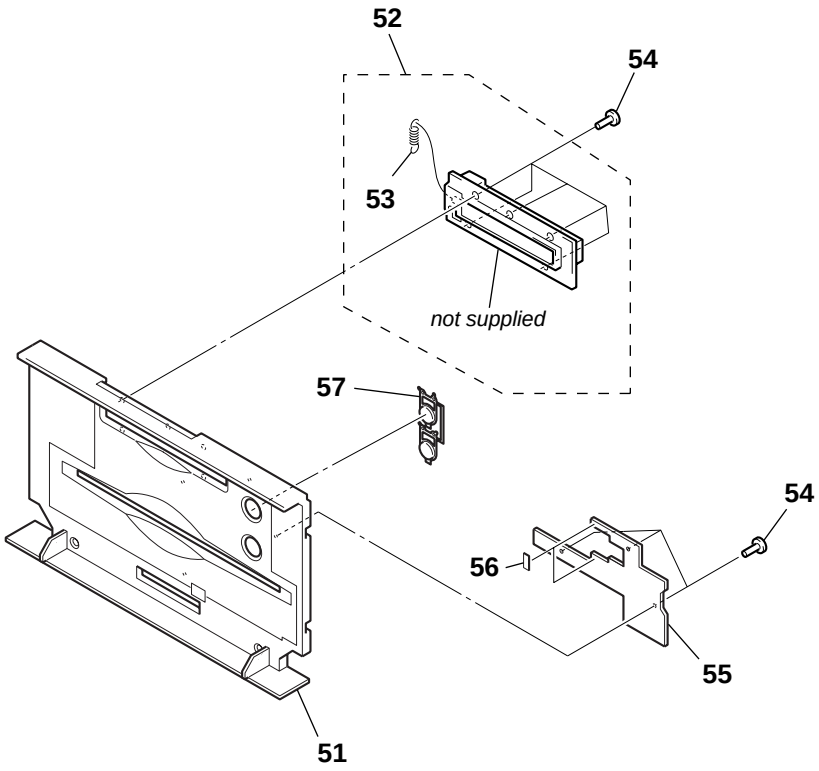
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

## 6-1. MAIN SECTION




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 1 | 3-037-885-02 | ROLLER (GUIDE) | |
| 2 | 3-037-891-01 | SPRING (GUIDE) | |
| 3 | 3-037-890-01 | SPRING (FULCRUM: R), TORSION | |
| 4 | 3-037-889-01 | SPRING (FULCRUM: L), TORSION | |
| 5 | 3-023-449-21 | COVER (FLEXIBLE) | |
| 6 | 3-037-878-01 | SCREW, ORNAMENTAL | |
| 7 | 3-236-431-01 | PANEL (L), GUIDE | |
| 8 | 4-356-741-31 | SCREW, TAPPING (BIND 2X8) | |
| 9 | 3-233-365-01 | COVER | |
| 10 | 3-236-432-01 | PANEL (R), GUIDE | |
| 11 | 1-790-926-21 | CORD (WITH CONNECTOR) (POWER) | |
| * 12 | 3-040-641-01 | SHEET (FLEXIBLE), PROTECTION | |
| 13 | 3-245-717-01 | SLEEVE (PANEL) | |
| F1 | 1-532-877-11 | FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V) | |
| #1 | 7-685-792-09 | SCREW +PTT 2.6X6 (S) | |

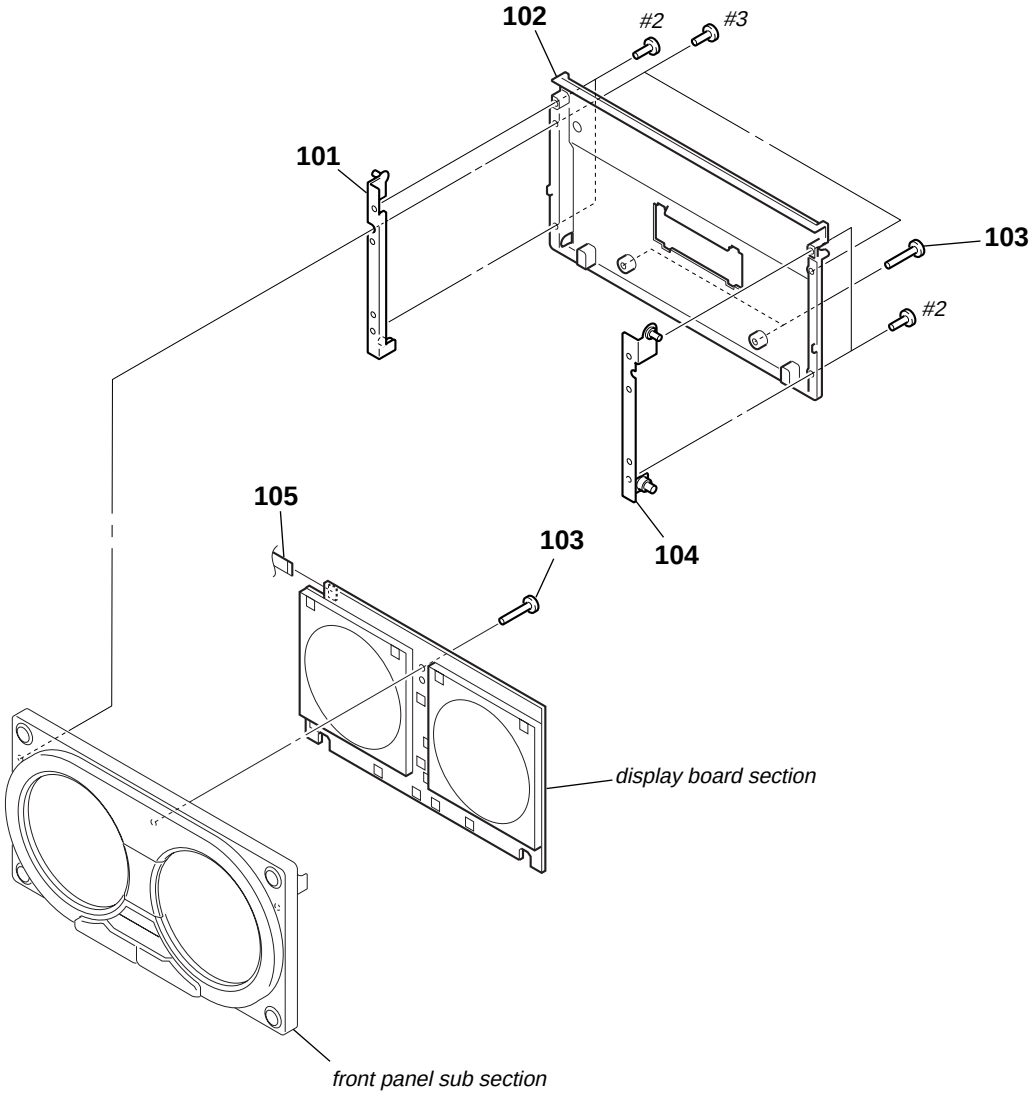
## 6-2. SUB PANEL SUB ASSY SECTION




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 51 | X-3380-866-2 | PANEL SUB ASSY, SUB | |
| * 52 | X-3377-968-1 | ESCUTCHEON (MD) ASSY | |
| 53 | 3-025-484-01 | SPRING (DOOR) | |
| 54 | 3-038-395-01 | SCREW (2X4), +P TIGHT | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 55 | A-3274-514-A | SUB BOARD, COMPLETE | |
| * 56 | 3-230-714-01 | SHEET (PHOTO) | |
| 57 | 3-233-356-01 | BUTTON (EJECT) (⏏ MD. ⏏ CD) | |

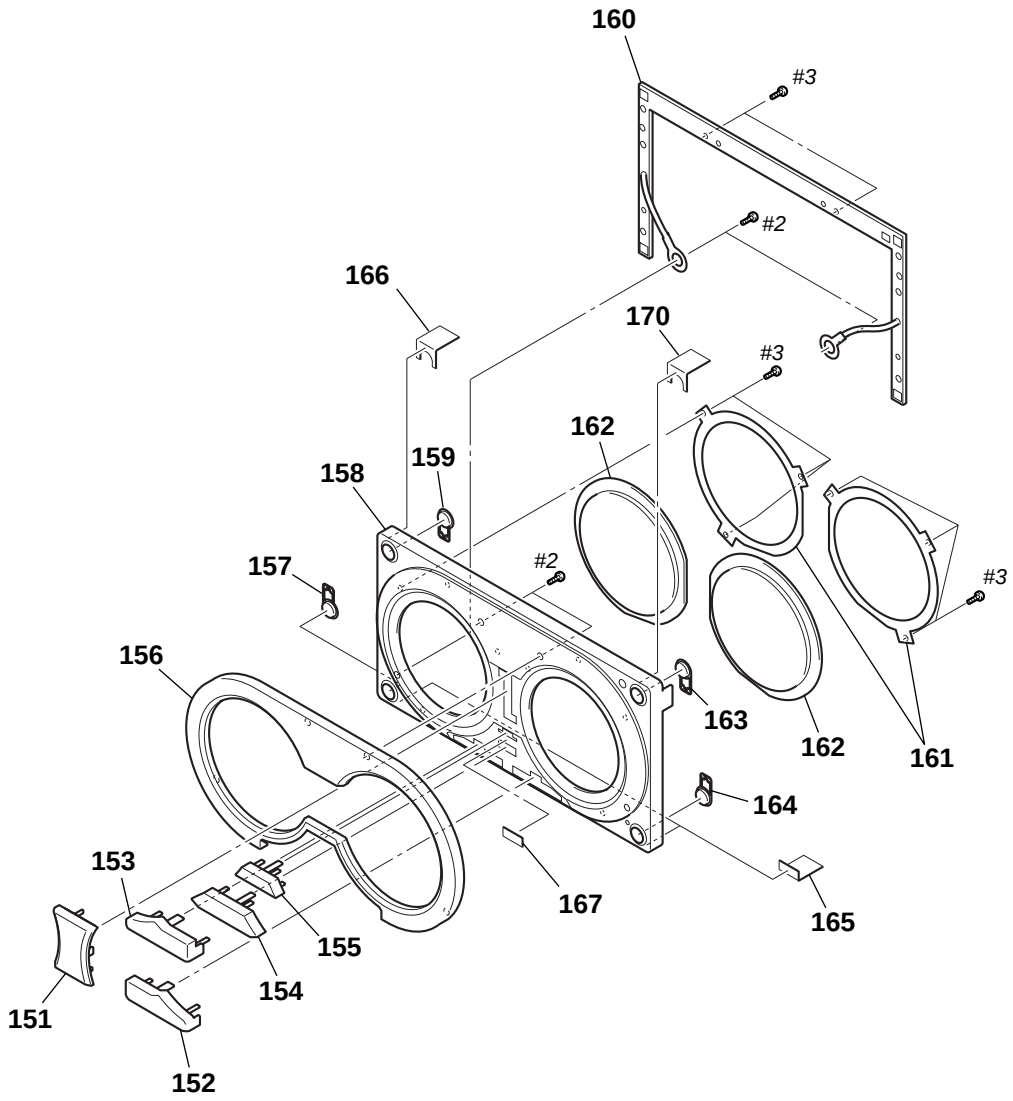
## 6-3. FRONT PANEL SECTION




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| * 101 | X-3377-682-1 | BRACKET (L) ASSY | |
| 102 | 3-037-855-41 | PANEL, FRONT BACK | |
| 103 | 4-356-741-31 | SCREW, TAPPING (BIND 2X8) | |
| * 104 | X-3377-683-1 | BRACKET (R) ASSY | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 105 | 1-823-602-21 | CABLE, FLEXIBLE FLAT 7P | |
| #2 | 7-621-772-10 | SCREW +B 2X4 | |
| #3 | 7-685-103-19 | SCREW +P 2X5 TYPE2 NON-SLIT | |

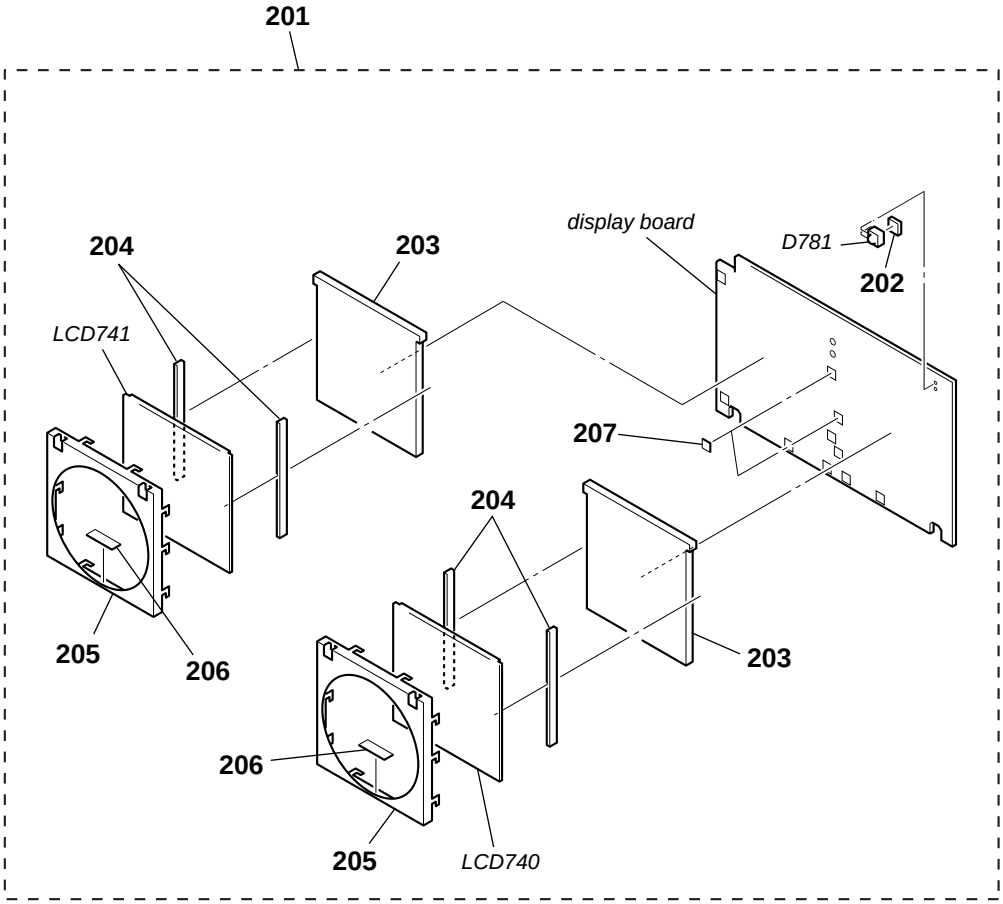
## 6-4. FRONT PANEL SUB SECTION




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 151 | 3-233-344-01 | BUTTON (VOL) (+ VOL -) | |
| 152 | 3-233-348-01 | BUTTON (AMS) (⏮ ◀◀ AMS ▶▶ ⏭) | |
| 153 | 3-233-347-01 | BUTTON (DISC) (- DISC +) | |
| 154 | 3-233-345-01 | BUTTON (SOURCE) | |
| 155 | 3-233-346-01 | BUTTON (MODE) | |
| 156 | 3-233-343-01 | PANEL (SWP) | |
| 157 | 3-233-351-11 | BUTTON (ATT) | |
| 158 | X-3380-865-1 | PANEL SUB ASSY, FRONT | |
| 159 | 3-233-350-01 | BUTTON (ANGLE) | |
| 160 | 1-682-243-14 | KEY BOARD | |

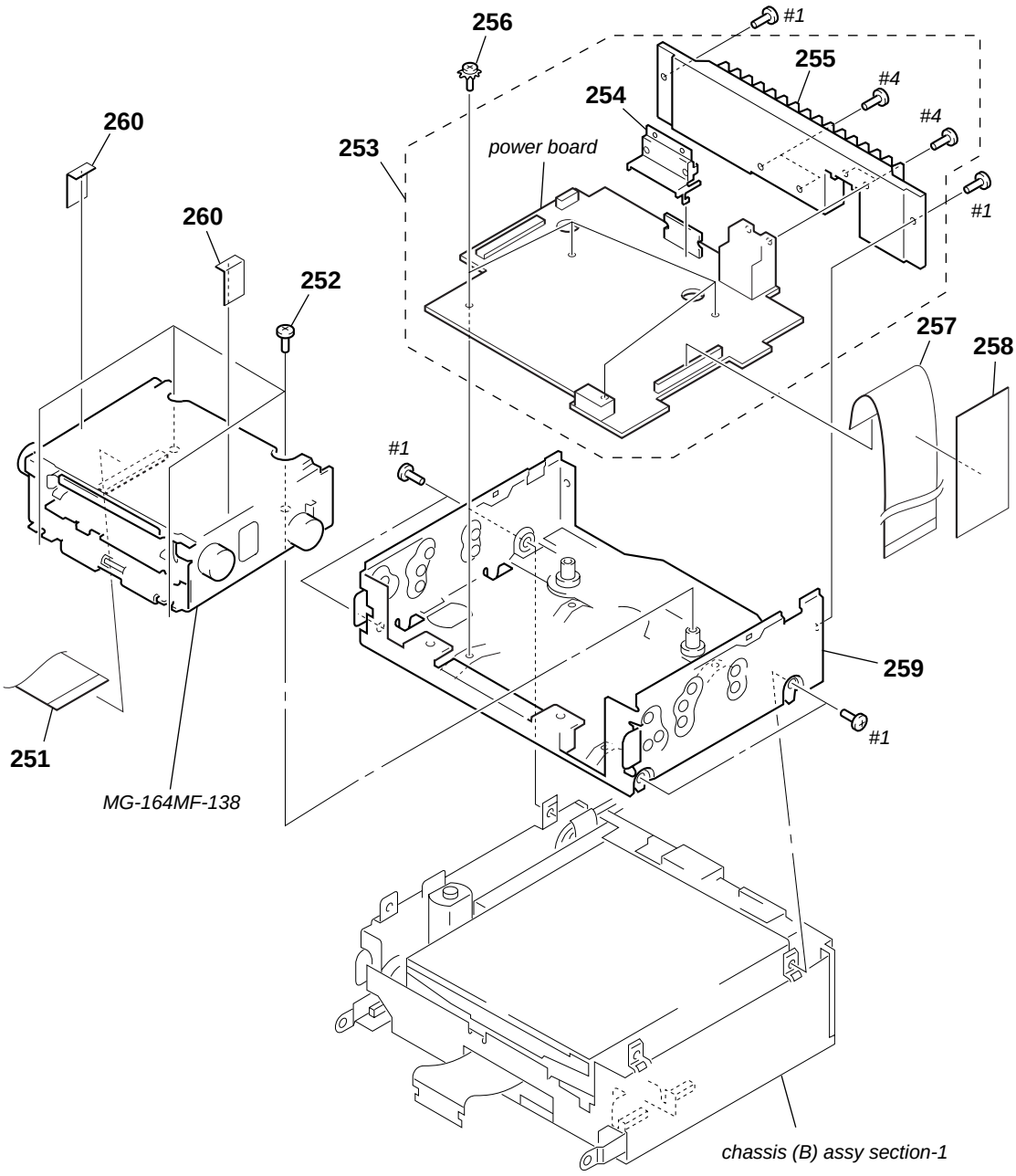
| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 161 | 3-233-338-01 | HOLDER (INDICATION PLATE) | |
| 162 | 3-233-337-02 | PLATE, INDICATION | |
| 163 | 3-233-349-01 | BUTTON (OPEN/CLOSE) | |
| 164 | 3-233-352-01 | BUTTON (OFF) | |
| 165 | 3-237-948-01 | SHEET (B), ELECTROSTATIC | |
| 166 | 3-237-949-01 | SHEET (ANGLE), ELECTROSTATIC | |
| 167 | 3-238-755-01 | CUSHION (MODE) | |
| 170 | 3-237-950-01 | SHEET, ELECTROSTATIC | |
| #2 | 7-621-772-10 | SCREW +B 2X4 | |
| #3 | 7-685-103-19 | SCREW +P 2X5 TYPE2 NON-SLIT | |

## 6-5. DISPLAY BOARD SECTION



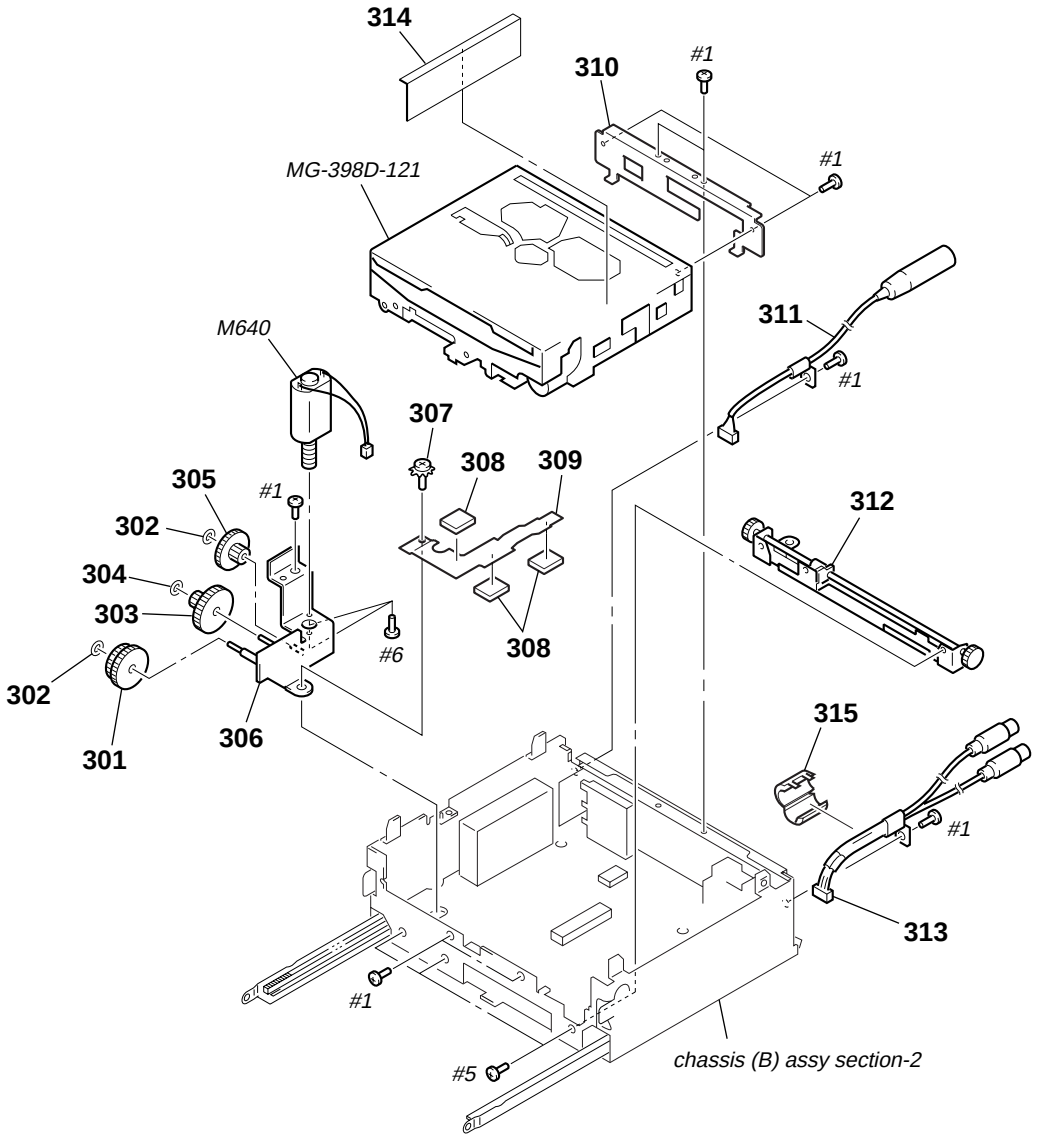

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 201 | A-3274-486-A | DISPLAY BOARD, COMPLETE | |
| 202 | 3-237-008-01 | CUSHION (REMOTE CONTROL) | |
| 203 | X-3381-174-1 | PLATE ASSY, LIGHT GUIDE | |
| 204 | 1-694-889-11 | CONDUCTIVE BOARD, CONNECTION | |
| 205 | 3-233-339-01 | PLATE (LCD), GROUND | |
| 206 | 3-238-950-01 | SHEET (GROUND PLATE) | |
| 207 | 3-327-119-01 | SPACER (A) | |
| D781 | 8-719-083-14 | DIODE RRX9000-0501 (REMOTE CONTROL RECEIVER) | |
| LCD740 | 1-804-607-11 | DISPLAY PANEL, LIQUID CRYSTAL | |
| LCD741 | 1-804-608-11 | DISPLAY PANEL, LIQUID CRYSTAL | |

## 6-6. CHASSIS (T) ASSY SECTION




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 251 | 1-823-603-21 | CABLE, FLEXIBLE FLAT (30 CORE) | |
| 252 | 3-015-314-01 | SCREW (2.6X5) (CZN) (C TITE),+PTT | |
| 253 | A-3274-480-A | POWER BOARD, COMPLETE | |
| * 254 | 3-022-317-01 | BRACKET (AMP) | |
| 255 | 3-233-364-01 | HEAT SINK | |
| 256 | 3-376-464-11 | SCREW (+PTT 2.6X6), GROUND POINT | |
| 257 | 1-823-604-11 | CABLE, FLEXIBLE FLAT (40 CORE) | |
| 258 | 3-237-220-01 | SHEET (40P), PROTECTION | |
| 259 | X-3380-867-1 | CHASSIS (T) SUB ASSY | |
| 260 | 3-238-753-01 | SHEET (MD) | |
| #1 | 7-685-792-09 | SCREW +PTT 2.6X6 (S) | |
| #4 | 7-685-794-09 | SCREW +PTT 2.6X10 (S) | |

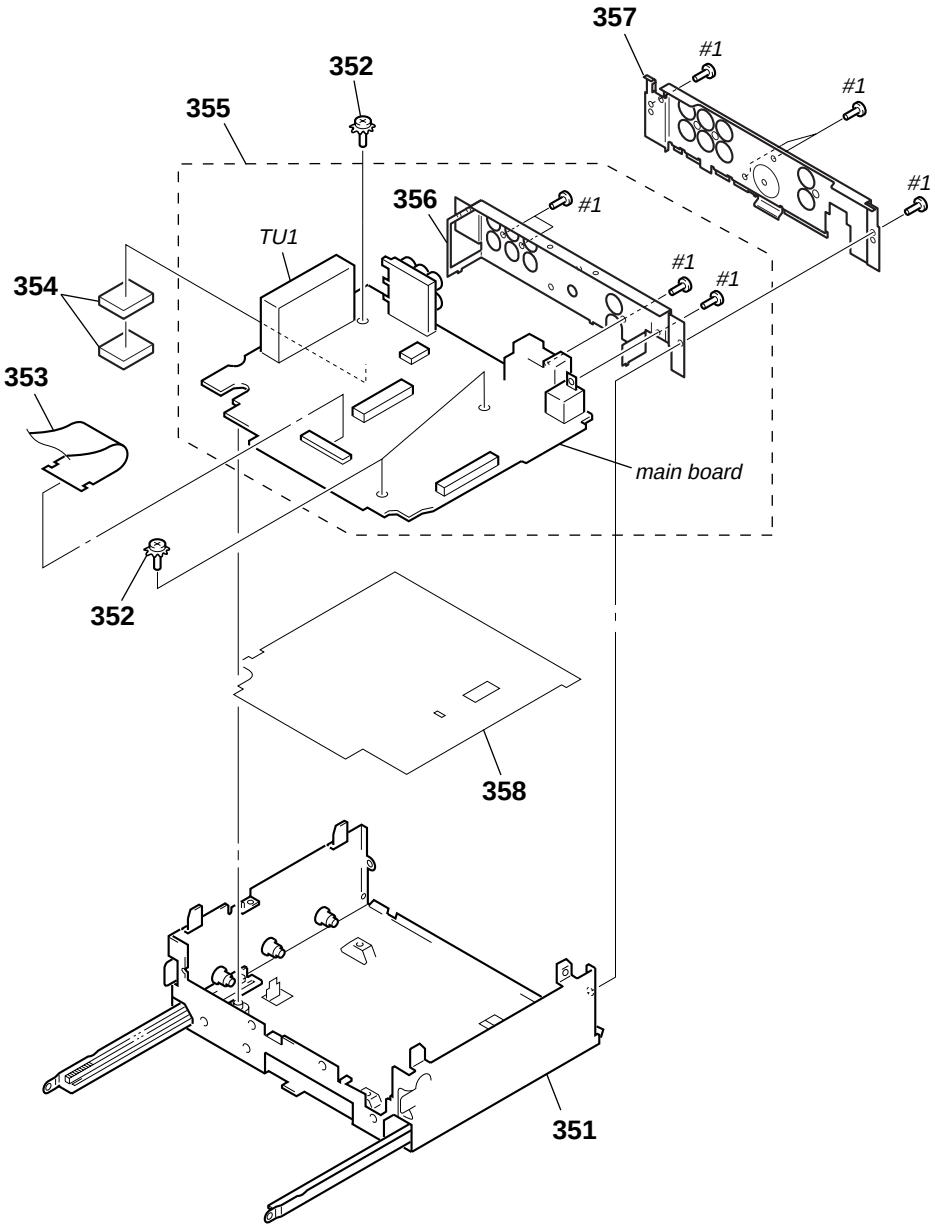
## 6-7. CHASSIS (B) ASSY SECTION-1




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 301 | 3-038-766-01 | GEAR (3) (C) | |
| 302 | 3-342-940-01 | WASHER (M) | |
| 303 | 3-038-765-01 | GEAR (3) (B) | |
| 304 | 3-318-136-01 | WASHER, POLYETHYLENE, DIA. 1.2 | |
| 305 | 3-035-841-01 | GEAR (2) (WORM H) | |
| * 306 | X-3377-696-1 | BRACKET (MOTOR) ASSY | |
| 307 | 3-376-464-11 | SCREW (+PTT 2.6X6), GROUND POINT | |
| 308 | 3-236-638-01 | SHEET, RADIATION | |
| 309 | 3-236-637-01 | HEAT SINK | |
| 310 | 3-233-360-01 | BRACKET (CD) | |

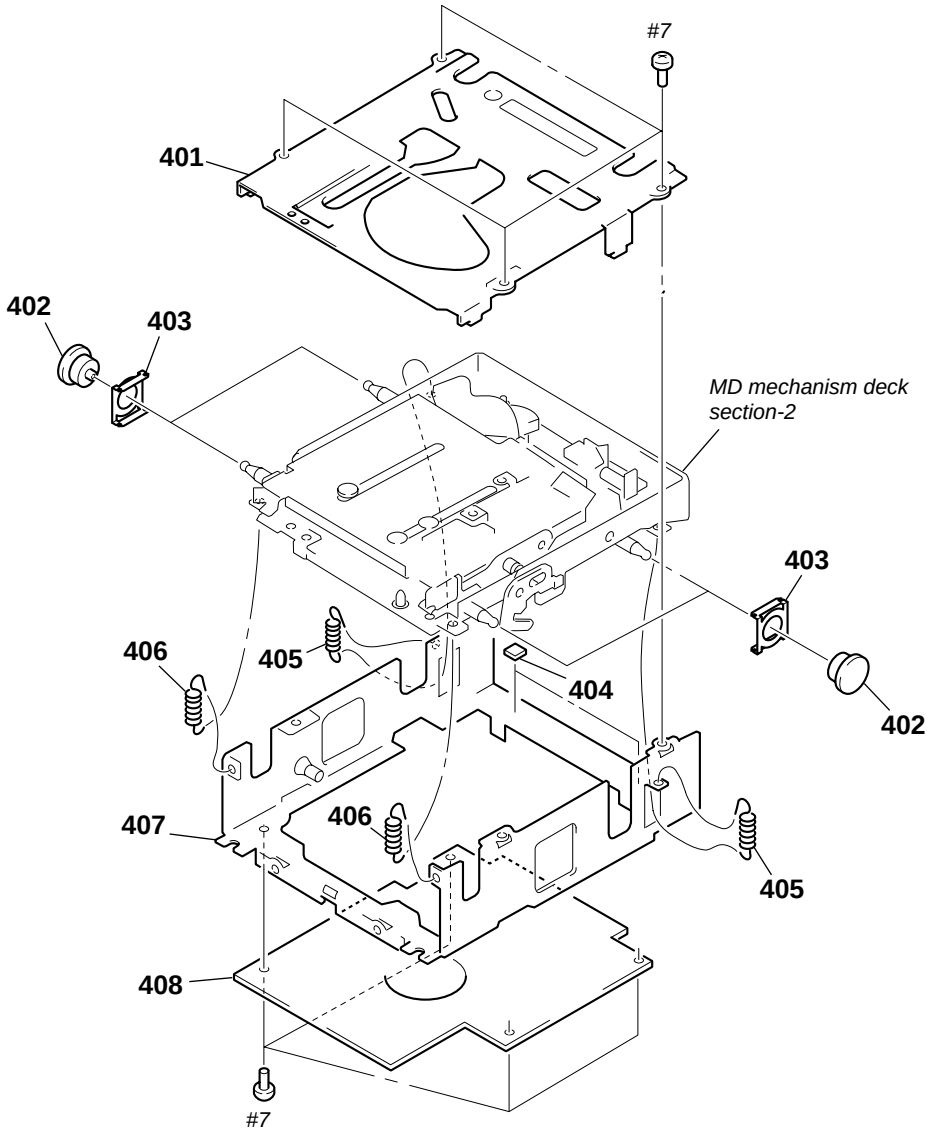
| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 311 | 1-777-246-21 | CORD (WITH CONNECTOR) (ANT) | |
| 312 | X-3377-690-1 | SHAFT ASSY, DRIVE | |
| 313 | 1-790-355-31 | CORD (WITH CONNECTOR) (RCA) (SUBWOOFER OUT (MONO)) | |
| 314 | 3-238-752-01 | SHEET (CD2) | |
| 315 | 1-500-082-11 | CLAMP, SLEEVE FERRITE | |
| M640 | X-3377-884-1 | MOTOR ASSY (FRONT PANEL OPEN/CLOSE) | |
| #1 | 7-685-792-09 | SCREW +PTT 2.6X6 (S) | |
| #5 | 7-621-259-25 | SCREW +P 2.6X4 | |
| #6 | 7-627-553-28 | SCREW, PRECISION +P 2X2.5 | |

## 6-8. CHASSIS (B) ASSY SECTION-2



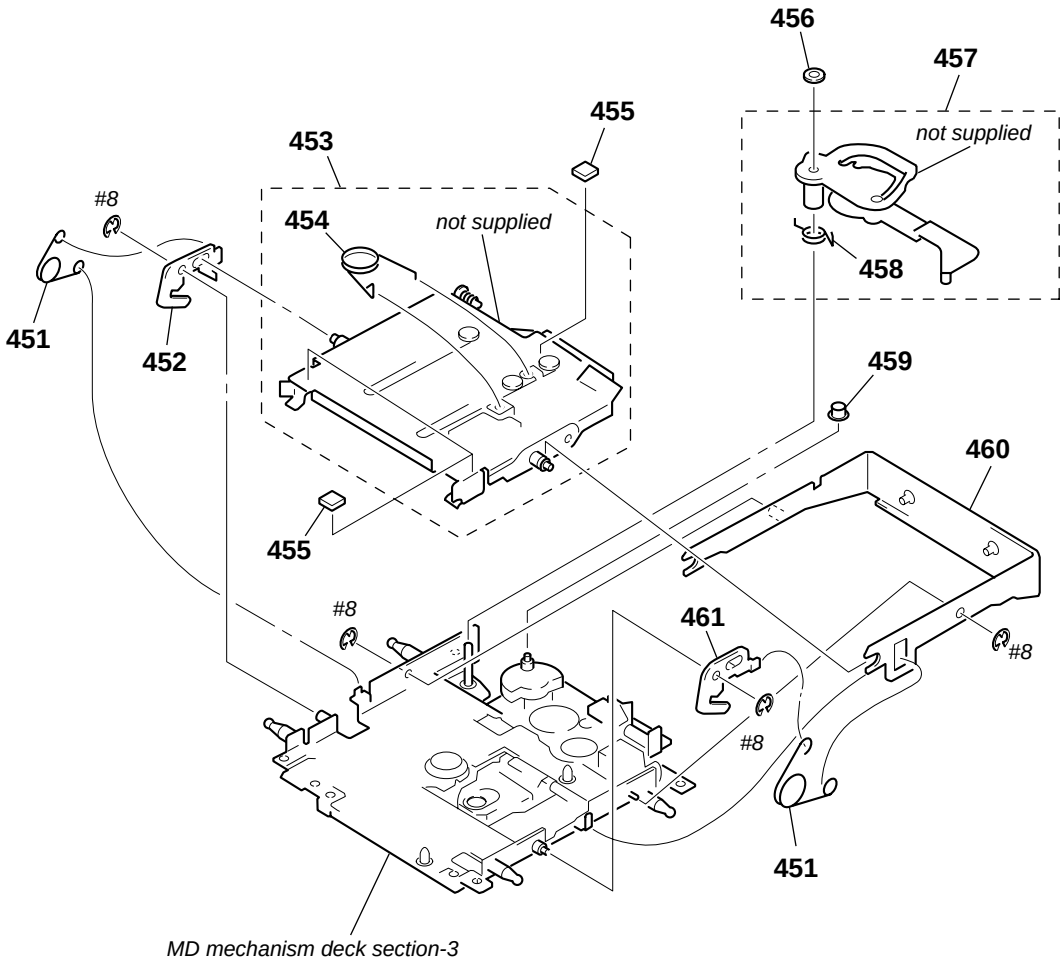

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 351 | X-3382-295-1 | CHASSIS (B) ASSY | |
| 352 | 3-376-464-11 | SCREW (+PTT 2.6X6), GROUND POINT | |
| 353 | 1-668-780-11 | KEY CONNECTION FLEXIBLE BOARD | |
| 354 | 3-236-638-01 | SHEET, RADIATION | |
| 355 | A-3274-476-A | MAIN BOARD, COMPLETE | |
| 356 | 3-233-359-01 | BRACKET (MAIN) | |
| 357 | 3-233-358-01 | PANEL, REAR | |
| * 358 | 3-038-351-02 | SHEET (B), INSULATING | |
| TU1 | A-3220-812-A | TUNER UNIT (TUX-020) | |
| #1 | 7-685-792-09 | SCREW +PTT 2.6X6 (S) | |

## 6-9. MD MECHANISM DECK SECTION-1 (MG-164MF-138)




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| * 401 | X-3379-368-1 | COVER ASSY, MD | |
| 402 | 3-931-897-61 | DAMPER (T) | |
| * 403 | 3-220-096-02 | BRACKET (DAMPER) | |
| * 404 | 3-034-301-01 | CUSHION (EJ2) | |
| 405 | 3-921-111-01 | SPRING (FL2), TENSION | |
| 406 | 3-032-714-02 | SPRING (FLOAT F), TENSION | |
| * 407 | X-3379-367-2 | CHASSIS ASSY, MD | |
| * 408 | A-3326-422-A | SERVO (MD) BOARD, COMPLETE | |
| #7 | 7-685-851-04 | SCREW +BVTT 2X4 (S) | |

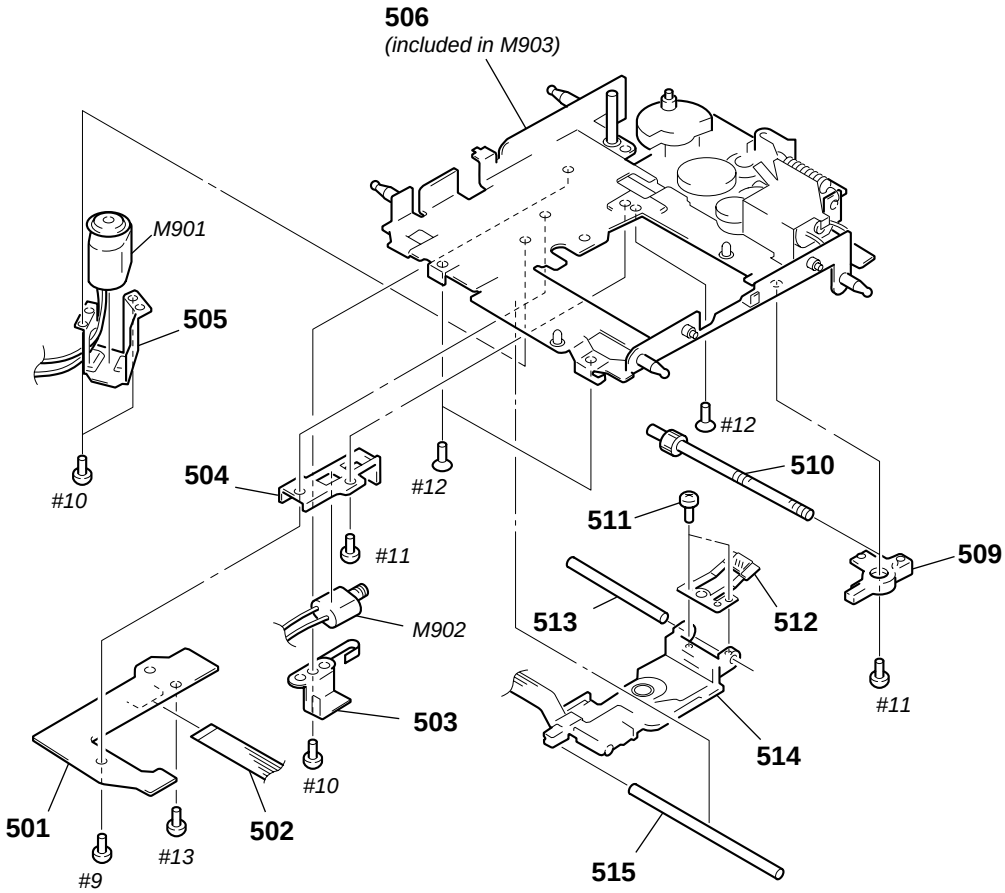
## 6-10.MD MECHANISM DECK SECTION-2 (MG-164MF-138)




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 451 | 3-919-281-01 | SPRING (CHKG) | |
| * 452 | 3-032-712-01 | LEVER (LOCK R) | |
| 453 | X-3381-040-1 | HOLDER ASSY | |
| 454 | 3-032-682-01 | SPRING (HOLDER) | |
| * 455 | 3-034-302-01 | CUSHION (EJ3) | |
| 456 | 3-035-932-01 | WASHER, STOPPER | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| * 457 | X-3379-362-1 | LEVER (LE23) ASSY | |
| 458 | 3-032-707-01 | SPRING (LEVER LE) | |
| 459 | 3-925-034-01 | ROLLER (GLE) | |
| * 460 | X-3376-798-2 | ARM ASSY, CHUCKING | |
| * 461 | 3-032-711-01 | LEVER (LOCK L) | |
| #8 | 7-624-102-04 | STOP RING 1.5, TYPE-E | |

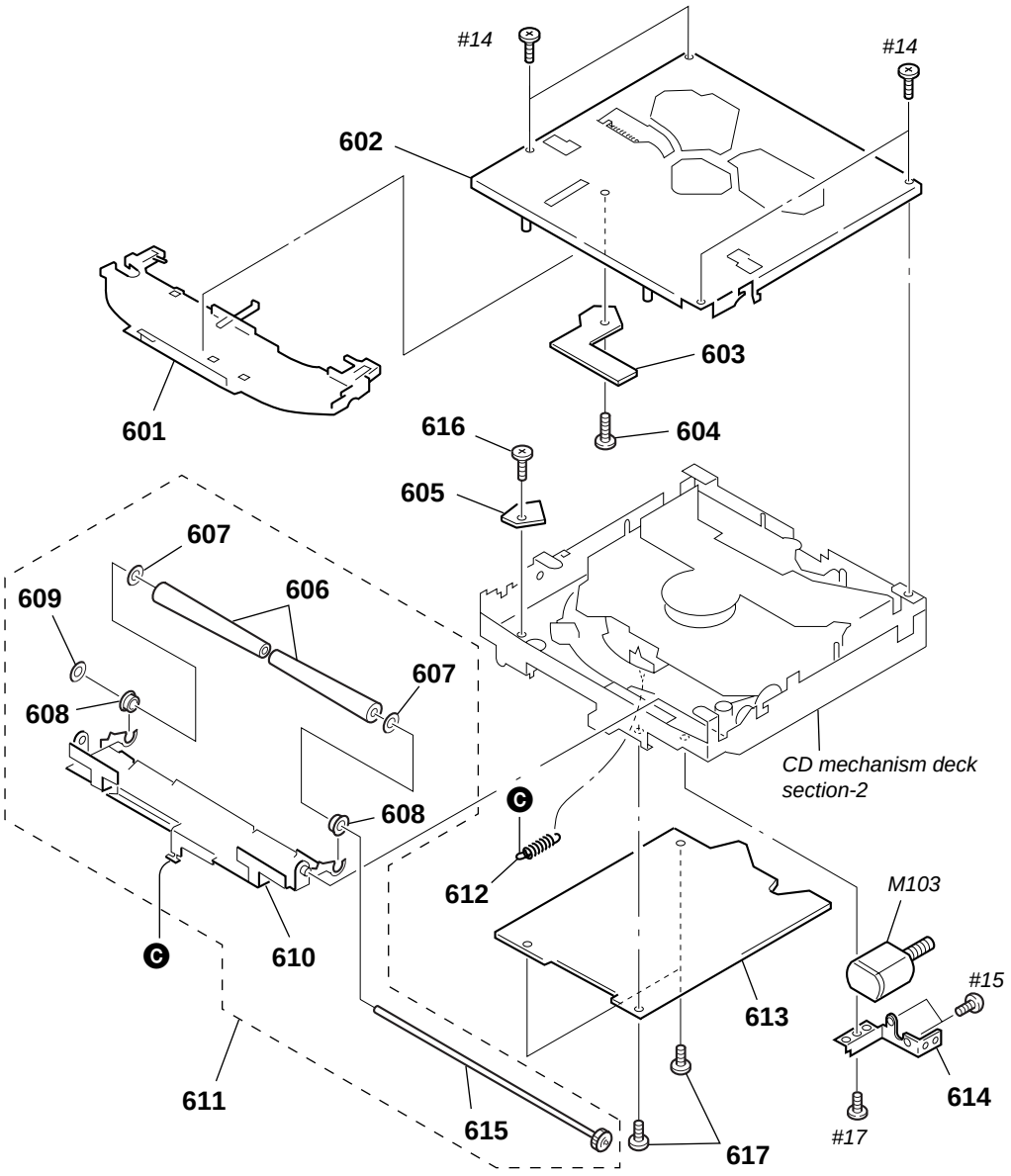
## 6-11.MD MECHANISM DECK SECTION-3 (MG-164MF-138)




The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 501 | A-3326-420-A | SENSOR (MD) BOARD, COMPLETE | |
| 502 | 1-757-311-11 | CABLE, FLEXIBLE FLAT (11 CORE) | |
| * 503 | 3-919-283-01 | BRACKET (SL) | |
| * 504 | 3-032-704-02 | BASE (SL) | |
| * 505 | 3-919-297-01 | RETAINAER (SP) | |
| 506 | A-3315-218-C | CHASSIS (OP) ASSY (included in M903) | |
| * 509 | 3-032-705-01 | BEARING (SL) | |
| 510 | X-3373-213-1 | SCREW ASSY, FEED | |
| 511 | 3-939-590-07 | SCREW (IB LOCK) | |
| 512 | 3-026-082-11 | SPRING (SL OUTSERT), FEED | |
| * 513 | 3-919-293-01 | SHAFT (SL) | |
| ⚠514 | X-3379-728-1 | OPTICAL PICK-UP (KMS-241C) | |
| * 515 | 3-920-537-01 | SHAFT (SL2) | |
| M901 | A-3301-407-A | MOTOR ASSY, SP (SPINDLE) (for MD) | |
| M902 | A-3291-190-A | MOTOR ASSY, SL (SLED) (for MD) | |
| #9 | 7-628-253-35 | SCREW +PS 2X8 | |
| #10 | 7-627-852-37 | PRECISION SCREW +P1.7X1.8TYPE3 | |
| #11 | 7-621-772-08 | SCREW +B 2X3 | |
| #12 | 7-621-555-10 | SCREW +K 2X3 | |
| #13 | 7-628-253-00 | SCREW +PS 2X4 | |

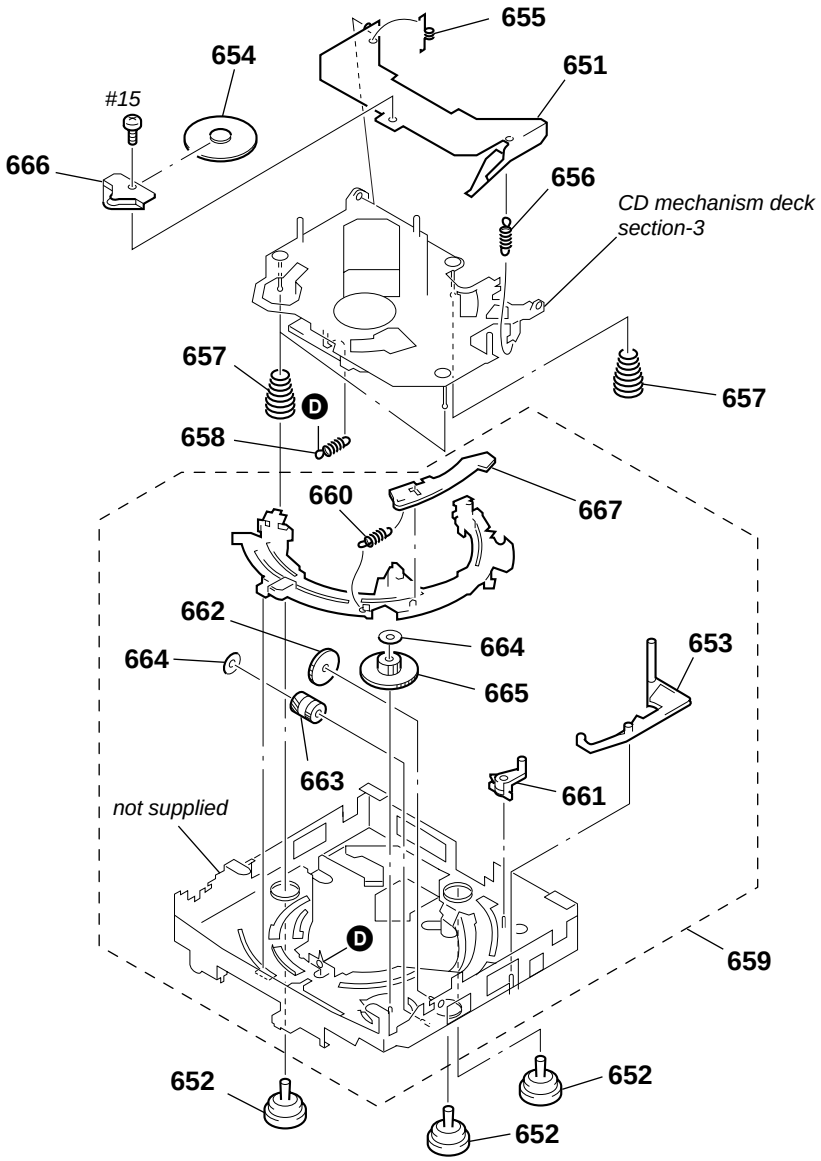
## 6-12.CD MECHANISM DECK SECTION-1 (MG-398D-121)




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 601 | 3-032-474-13 | GUIDE (DISC M) | |
| 602 | X-3378-870-4 | CHASSIS (T388) ASSY | |
| * 603 | 1-660-797-31 | SENSOR (CD) BOARD | |
| 604 | 3-044-206-11 | SCREW, SPECIAL | |
| * 605 | 1-659-837-11 | LOAD BOARD | |
| 606 | 3-040-044-01 | ROLLER (S) | |
| 607 | 3-040-042-01 | WASHER | |
| 608 | 3-040-022-01 | RETAINER (ROLLER), SHAFT | |
| 609 | 3-043-880-01 | RING (RA), RETAINING | |
| 610 | 3-040-040-23 | ARM (ROLLER) | |
| 611 | A-3315-040-A | ROLLER ASSY, ARM | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 612 | 3-040-034-01 | SPRING (RA), TENSION | |
| 613 | A-3283-207-A | SERVO (CD) BOARD, COMPLETE | |
| * 614 | 3-039-629-02 | BRACKET (MOTOR) | |
| 615 | A-3301-980-A | SHAFT ROLLER ASSY | |
| 616 | 3-241-292-11 | SCREW, SPECIAL | |
| 617 | 3-241-292-31 | SCREW, SPECIAL | |
| M103 | A-3315-039-A | MOTOR SUB ASSY, LD (LOADING) (for CD) | |
| #14 | 7-627-553-37 | SCREW, PRECISION +P 2X2 | |
| #15 | 7-627-553-17 | SCREW, PRECISION +P 2X3 | |
| #17 | 7-685-781-09 | SCREW +PTT 2X4 (S) | |

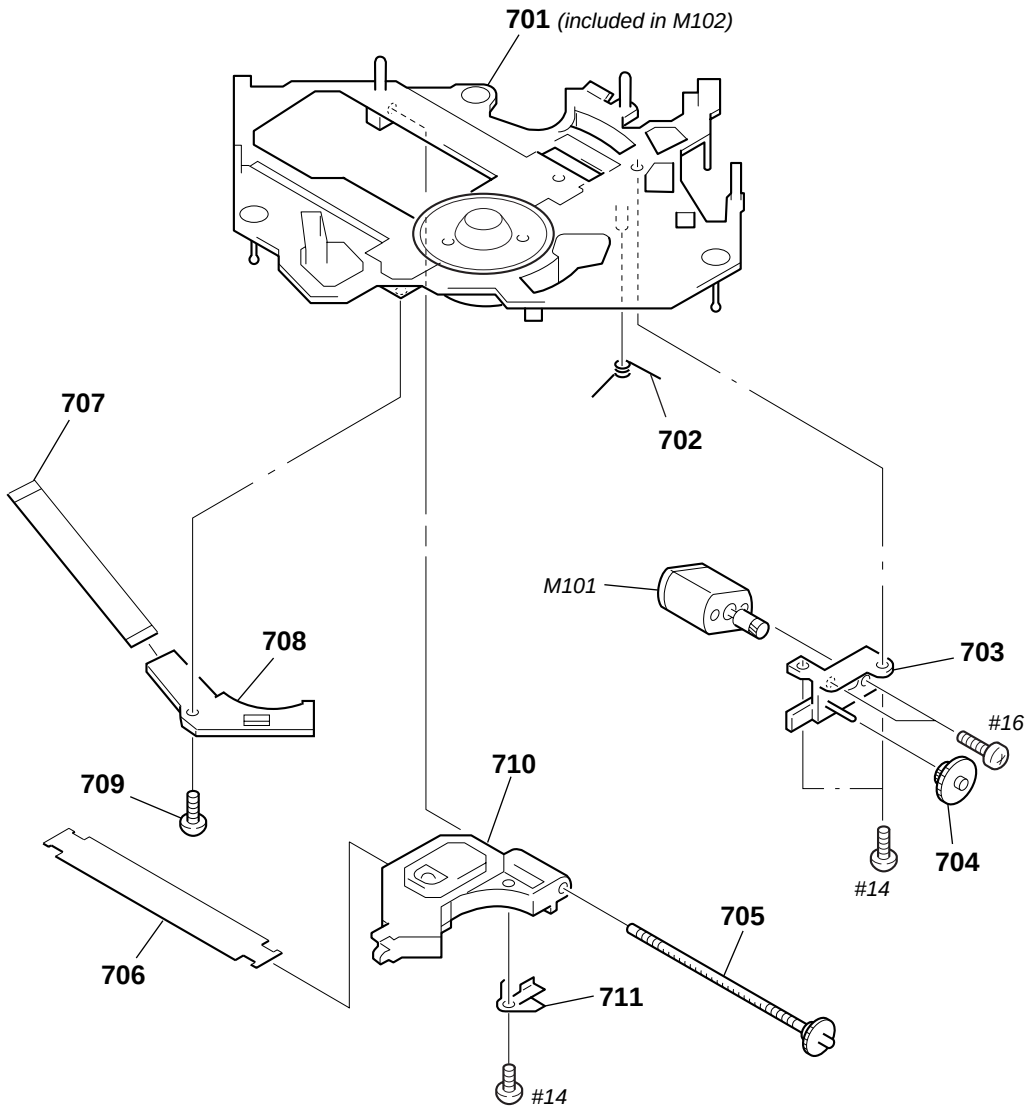
## 6-13.CD MECHANISM DECK SECTION-2 (MG-398D-121)




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 651 | X-3378-471-7 | ARM ASSY, CHUCKING | |
| 652 | 3-040-031-01 | DAMPER (T) | |
| 653 | 3-935-828-05 | LEVER (D) | |
| 654 | 3-913-404-02 | RETAINER (DISC) | |
| 655 | 3-048-258-02 | SPRING (8) (K) | |
| 656 | 3-040-026-01 | SPRING (CH), TENSION | |
| 657 | 3-040-032-01 | SPRING (FL), COMPRESSION | |
| 658 | 3-040-033-01 | SPRING (KF1), TENSION | |
| 659 | A-3315-245-B | CHASSIS (M) ASSY | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 660 | 3-220-180-01 | SPRING (TR2), TENSION | |
| 661 | 3-931-881-03 | LEVER (LOCK) | |
| 662 | 3-931-882-02 | GEAR (MDL) | |
| 663 | 3-007-537-11 | WHEEL (U), WORM | |
| 664 | 3-018-272-01 | WASHER | |
| 665 | 3-014-727-01 | WHEEL (LW), WORM | |
| 666 | 3-931-894-02 | BRACKET (CP) | |
| 667 | 3-007-536-05 | LEVER (TR) | |
| #15 | 7-627-553-17 | SCREW, PRECISION +P 2X2 | |

## 6-14.CD MECHANISM DECK SECTION-3 (MG-398D-121)




The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 701 | X-3378-961-1 | CHASSIS ASSY (OP) (included in M102) | |
| 702 | 3-040-029-01 | SPRING (SL), TORSION | |
| 703 | 3-040-045-01 | BASE (DRIVING) | |
| 704 | 3-040-194-01 | GEAR (MIDWAY) | |
| 705 | A-3301-983-A | SHAFT (FEED) ASSY | |
| 706 | 1-676-707-11 | PICK UP FLEXIBLE BOARD | |
| 707 | 1-677-182-11 | MOTOR FLEXIBLE BOARD | |
| * 708 | 1-676-708-11 | SL SW BOARD | |
| 709 | 3-909-607-01 | SCREW | |
| ⚠710 | 8-820-103-11 | OPTICAL PICK-UP KSS-720A/C-RP | |
| 711 | 3-040-030-01 | SPRING (FEED), PLATE | |
| M101 | A-3301-985-A | MOTOR ASSY, SLED | |
| #14 | 7-627-553-37 | PRECISION SCREW +P 2X3 TYPE 3 | |
| #16 | 7-627-850-28 | SCREW, PRECISION +P 1.4X3 | |

## DISPLAY

# SECTION 7
# ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. .  uPA. . : µPA. .
  uPB. . : µPB. .  uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| | A-3274-486-A | DISPLAY BOARD, COMPLETE | | | |
| | | ********** | | | |
| | X-3381-174-1 | PLATE ASSY, LIGHT GUIDE | | | |
| | 1-694-889-11 | CONDUCTIVE BOARD, CONNECTION | | | |
| | 3-233-339-01 | PLATE (LCD), GROUND | | | |
| | 3-237-008-01 | CUSHION (REMOTE CONTROL) | | | |
| | 3-238-950-01 | SHEET (GROUND PLATE) | | | |
| | 3-327-119-01 | SPACER (A) | | | |
| | | < CAPACITOR > | | | |
| C710 | 1-104-823-11 | TANTALUM CHIP | 47uF | 20% | 16V |
| C712 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C713 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C714 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C715 | 1-164-230-11 | CERAMIC CHIP | 220PF | 5% | 50V |
| C716 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C717 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C718 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C719 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C720 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C721 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C740 | 1-115-412-11 | CERAMIC CHIP | 680PF | 5% | 25V |
| C741 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10% | 16V |
| C742 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10% | 16V |
| C743 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10% | 16V |
| C744 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C745 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C746 | 1-115-412-11 | CERAMIC CHIP | 680PF | 5% | 25V |
| C747 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10% | 16V |
| C748 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10% | 16V |
| C749 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10% | 16V |
| C750 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C751 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C752 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C753 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C779 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C780 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C781 | 1-125-837-11 | CERAMIC CHIP | 1uF | 10% | 6.3V |
| C782 | 1-164-315-11 | CERAMIC CHIP | 470PF | 5% | 50V |
| C783 | 1-104-914-11 | TANTALUM CHIP | 22uF | 20% | 16V |
| C784 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C790 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C791 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C792 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C793 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C794 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| | | < CONNECTOR > | | | |
| CN710 | 1-770-352-11 | CONNECTOR, FPC 30P | | | |
| * CN711 | 1-793-749-21 | CONNECTOR, FFC (LIF (NOBN-ZIF)) 7P | | | |
| | | < DIODE > | | | |
| D713 | 8-719-820-05 | DIODE MA152WA-TX | | | |
| D714 | 8-719-404-50 | DIODE MA111-TX | | | |
| D740 | 8-719-420-14 | DIODE MA8082-M (TX) | | | |
| D741 | 8-719-422-41 | DIODE MA8051-L-TX | | | |
| D780 | 8-719-977-12 | DIODE MA8068-M-TX | | | |
| D781 | 8-719-083-14 | DIODE RRX9000-0501 (REMOTE CONTROL RECEIVER) | | | |
| D790 | 8-719-420-51 | DIODE MA729-TX | | | |
| D791 | 8-719-404-50 | DIODE MA111-TX | | | |
| D792 | 8-719-404-50 | DIODE MA111-TX | | | |
| D793 | 8-719-420-51 | DIODE MA729-TX | | | |
| D794 | 8-719-404-50 | DIODE MA111-TX | | | |
| D795 | 8-719-404-50 | DIODE MA111-TX | | | |
| D796 | 8-719-420-51 | DIODE MA729-TX | | | |
| D801 | 8-719-026-34 | LED CL-170UR-CD-T (DISC) | | | |
| D802 | 8-719-026-34 | LED CL-170UR-CD-T (AMS) | | | |
| D803 | 8-719-026-34 | LED CL-170UR-CD-T (VOL) | | | |
| D810 | 8-719-404-50 | DIODE MA111-TX | | | |
| D811 | 8-719-404-50 | DIODE MA111-TX | | | |
| D812 | 8-719-404-50 | DIODE MA111-TX | | | |
| | | < FERRITE BEAD > | | | |
| FB740 | 1-500-240-22 | FERRITE 0uH | | | |
| FB750 | 1-500-240-22 | FERRITE 0uH | | | |
| | | < IC > | | | |
| IC701 | 8-759-443-02 | IC TC75W51FU-TE12R | | | |
| IC710 | 6-801-936-01 | IC HD6432355A45F | | | |
| IC712 | 8-759-277-63 | IC TC7W14FU (TE12R) | | | |
| IC740 | 8-759-653-26 | IC LC75878W | | | |
| IC741 | 8-759-653-26 | IC LC75878W | | | |
| IC780 | 8-759-830-18 | IC RRX9000-0601#1 | | | |
| IC790 | 8-759-388-63 | IC NJU7064V (TE2) | | | |
| IC791 | 8-759-586-19 | IC TC7WH123FU (TE12R) | | | |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| | | < COIL > | | | |
| L710 | 1-412-058-11 | INDUCTOR CHIP 10uH | | | |
| | | < LIQUID CRYSTAL DISPLAY > | | | |
| LCD740 | 1-804-607-11 | DISPLAY PANEL, LIQUID CRYSTAL | | | |
| LCD741 | 1-804-608-11 | DISPLAY PANEL, LIQUID CRYSTAL | | | |
| | | < LED > | | | |
| LED749 | 6-500-101-01 | LED HL002-F01-SO1 (LCD BACK LIGHT) | | | |
| LED750 | 6-500-101-01 | LED HL002-F01-SO1 (LCD BACK LIGHT) | | | |
| LED751 | 6-500-101-01 | LED HL002-F01-SO1 (LCD BACK LIGHT) | | | |
| LED752 | 6-500-101-01 | LED HL002-F01-SO1 (LCD BACK LIGHT) | | | |
| LED753 | 6-500-101-01 | LED HL002-F01-SO1 (LCD BACK LIGHT) | | | |
| LED754 | 6-500-101-01 | LED HL002-F01-SO1 (LCD BACK LIGHT) | | | |
| LED755 | 6-500-101-01 | LED HL002-F01-SO1 (LCD BACK LIGHT) | | | |
| LED756 | 6-500-101-01 | LED HL002-F01-SO1 (LCD BACK LIGHT) | | | |
| LED757 | 6-500-101-01 | LED HL002-F01-SO1 (LCD BACK LIGHT) | | | |
| LED758 | 6-500-101-01 | LED HL002-F01-SO1 (LCD BACK LIGHT) | | | |
| | | < SWITCH > | | | |
| LSW801 | 1-771-644-11 | SWITCH, KEY BOARD (WITH LED) (SOURCE) | | | |
| LSW806 | 1-771-644-11 | SWITCH, KEY BOARD (WITH LED) (AMS ⏮ ◀◀) | | | |
| LSW807 | 1-771-644-11 | SWITCH, KEY BOARD (WITH LED) (AMS ▶▶ ⏭) | | | |
| LSW808 | 1-771-644-11 | SWITCH, KEY BOARD (WITH LED) (MODE) | | | |
| LSW809 | 1-771-644-11 | SWITCH, KEY BOARD (WITH LED) (DISC –) | | | |
| LSW810 | 1-771-644-11 | SWITCH, KEY BOARD (WITH LED) (DISC +) | | | |
| LSW811 | 1-771-644-11 | SWITCH, KEY BOARD (WITH LED) (VOL –) | | | |
| LSW812 | 1-771-644-11 | SWITCH, KEY BOARD (WITH LED) (VOL +) | | | |
| | | < TRANSISTOR > | | | |
| Q747 | 8-729-920-85 | TRANSISTOR | 2SD1664-T101-QR | | |
| Q748 | 8-729-920-85 | TRANSISTOR | 2SD1664-T101-QR | | |
| Q749 | 8-729-920-85 | TRANSISTOR | 2SD1664-T101-QR | | |
| Q790 | 8-729-421-22 | TRANSISTOR | UN2211-TX | | |
| Q791 | 8-729-421-22 | TRANSISTOR | UN2211-TX | | |
| Q792 | 8-729-020-67 | TRANSISTOR | XN1A312-TX | | |
| | | < RESISTOR > | | | |
| R701 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/10W |
| R702 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/10W |
| R703 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/10W |
| R704 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/10W |
| R705 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R710 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R711 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R712 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R713 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R714 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R715 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R716 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R717 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R718 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/10W |
| R719 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R720 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R721 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R722 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R726 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R727 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R728 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R729 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R730 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R731 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R732 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R733 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R734 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R735 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R736 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R737 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R738 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R742 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/10W |
| R743 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R744 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R745 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R746 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R747 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R748 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R749 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R750 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R751 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/10W |
| R752 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R753 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R754 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R755 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R775 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R776 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R777 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R780 | 1-216-850-11 | METAL CHIP | 270K | 5% | 1/16W |
| R781 | 1-216-846-11 | METAL CHIP | 120K | 5% | 1/16W |
| R782 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R784 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R785 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R786 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R787 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R788 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R789 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R790 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R792 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/10W |
| R793 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R794 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R796 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/10W |
| R797 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R798 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/10W |
| R799 | 1-218-751-11 | RES-CHIP | 300K | 5% | 1/10W |
| R805 | 1-216-823-11 | METAL CHIP | 1.5K | 5% | 1/16W |
| R806 | 1-216-823-11 | METAL CHIP | 1.5K | 5% | 1/16W |
| R807 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R808 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R809 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/10W |
| R810 | 1-218-867-11 | RES-CHIP | 6.8K | 5% | 1/10W |
| R811 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/10W |
| R822 | 1-216-043-00 | RES-CHIP | 560 | 5% | 1/10W |
| R823 | 1-216-043-00 | RES-CHIP | 560 | 5% | 1/10W |
| R824 | 1-216-043-00 | RES-CHIP | 560 | 5% | 1/10W |

**DISPLAY** | **KEY** | **LOAD** | **MAIN**

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R825 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R826 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R827 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R828 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R831 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R832 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R833 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R834 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R835 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R836 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R837 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R838 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R839 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R840 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R841 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R842 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R843 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R844 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R845 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R846 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R847 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R848 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R849 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R850 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R851 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R852 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R853 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R854 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R857 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R858 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R859 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R860 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R861 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R862 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R869 | 1-216-043-00 | RES-CHIP | 560 | 5% | 1/10W |
| R870 | 1-216-043-00 | RES-CHIP | 560 | 5% | 1/10W |
| R871 | 1-216-043-00 | RES-CHIP | 560 | 5% | 1/10W |
| R872 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R873 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| | | < SWITCH > | | | |
| SW800 | 1-771-027-21 | SWITCH, KEYBOARD (LED NON) (RESET) | | | |
| | | < VIBRATOR > | | | |
| X701 | 1-795-103-11 | VIBRATOR, CERAMIC (18.432MHz) | | | |
| ********** | | | | | |
| | 1-682-243-14 | KEY BOARD | | | |
| | | ********** | | | |
| | | < CONNECTOR > | | | |
| * CN800 | 1-793-749-21 | CONNECTOR, FFC (LIF (NOBN-ZIF))7P | | | |
| | | < DIODE > | | | |
| D804 | 8-719-404-50 | DIODE MA111-TX | | | |
| D805 | 8-719-404-50 | DIODE MA111-TX | | | |
| D813 | 8-719-404-50 | DIODE MA111-TX | | | |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| | | < SWITCH > | | | |
| LSW803 | 1-771-549-21 | SWITCH, KEY BOARD (WITH LED) (ANGLE) | | | |
| LSW804 | 1-771-549-21 | SWITCH, KEY BOARD (WITH LED) | | | (OPEN/CLOSE) |
| LSW805 | 1-771-549-21 | SWITCH, KEY BOARD (WITH LED) (OFF) | | | |
| LSW813 | 1-771-549-21 | SWITCH, KEY BOARD (WITH LED) (ATT) | | | |
| | | < RESISTOR > | | | |
| R778 | 1-216-045-00 | METAL CHIP | 680 | 5% | 1/10W |
| R779 | 1-216-045-00 | METAL CHIP | 680 | 5% | 1/10W |
| R801 | 1-216-819-11 | METAL CHIP | 680 | 5% | 1/16W |
| R802 | 1-216-819-11 | METAL CHIP | 680 | 5% | 1/16W |
| R803 | 1-216-819-11 | METAL CHIP | 680 | 5% | 1/16W |
| R804 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R821 | 1-216-045-00 | METAL CHIP | 680 | 5% | 1/10W |
| R830 | 1-216-295-11 | SHORT CHIP | 0 | | |
| R855 | 1-216-045-00 | METAL CHIP | 680 | 5% | 1/10W |
| R856 | 1-216-045-00 | METAL CHIP | 680 | 5% | 1/10W |
| R864 | 1-216-045-00 | METAL CHIP | 680 | 5% | 1/10W |
| R866 | 1-216-045-00 | METAL CHIP | 680 | 5% | 1/10W |
| R867 | 1-216-045-00 | METAL CHIP | 680 | 5% | 1/10W |
| | | < TERMINAL > | | | |
| TB801 | 1-694-826-11 | TERMINAL, GROUND (GASKET) | | | |
| TB802 | 1-694-826-11 | TERMINAL, GROUND (GASKET) | | | |
| ********** | | | | | |
| * | 1-659-837-11 | LOAD BOARD | | | |
| | | ********** | | | |
| | | < SWITCH > | | | |
| SW3 | 1-529-566-31 | SWITCH, PUSH (1 KEY) (DISC SET) | | | |
| ********** | | | | | |
| | A-3274-476-A | MAIN BOARD, COMPLETE | | | |
| | | ********** | | | |
| | 3-233-359-01 | BRACKET (MAIN) | | | |
| | 7-685-792-09 | SCREW +PTT 2.6X6 (S) | | | |
| | | < BUZZER > | | | |
| BZ300 | 1-544-886-11 | BUZZER | | | |
| | | < CAPACITOR > | | | |
| C14 | 1-117-681-11 | ELECT CHIP | 100uF | 20% | 16V |
| C15 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C16 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C17 | 1-117-681-11 | ELECT CHIP | 100uF | 20% | 16V |
| C18 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C19 | 1-117-681-11 | ELECT CHIP | 100uF | 20% | 16V |
| C24 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10% | 16V |
| C25 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V |
| C26 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C28 | 1-127-573-11 | CERAMIC CHIP | 1uF | 10% | 16V |
| C29 | 1-127-573-11 | CERAMIC CHIP | 1uF | 10% | 16V |
| C30 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C31 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10% | 16V |
| C32 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C33 | 1-124-779-00 | ELECT CHIP | 10uF | 20% | 16V |

## MAIN

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| C34 | 1-163-233-11 | CERAMIC CHIP | 18PF | 5% | 50V |
| C39 | 1-125-891-11 | CERAMIC CHIP | 0.47uF | 10% | 10V |
| C100 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C101 | 1-163-137-00 | CERAMIC CHIP | 680PF | 5% | 50V |
| C102 | 1-163-137-00 | CERAMIC CHIP | 680PF | 5% | 50V |
| C103 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C104 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C105 | 1-163-137-00 | CERAMIC CHIP | 680PF | 5% | 50V |
| C106 | 1-163-137-00 | CERAMIC CHIP | 680PF | 5% | 50V |
| C107 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C108 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C109 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C110 | 1-163-137-00 | CERAMIC CHIP | 680PF | 5% | 50V |
| C111 | 1-163-137-00 | CERAMIC CHIP | 680PF | 5% | 50V |
| C112 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C113 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C114 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C115 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C116 | 1-115-339-11 | CERAMIC CHIP | 0.1uF | 10% | 50V |
| C117 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C118 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C119 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C120 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C121 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C122 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C123 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C124 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C125 | 1-165-901-11 | ELECT BL C | 2.2uF | 20% | 35V |
| C126 | 1-165-901-11 | ELECT BL C | 2.2uF | 20% | 35V |
| C127 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C128 | 1-165-901-11 | ELECT BL C | 2.2uF | 20% | 35V |
| C129 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C130 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C131 | 1-165-901-11 | ELECT BL C | 2.2uF | 20% | 35V |
| C132 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C133 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C134 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C135 | 1-165-898-11 | ELECT BL C | 1uF | 20% | 35V |
| C136 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C137 | 1-165-898-11 | ELECT BL C | 1uF | 20% | 35V |
| C138 | 1-163-125-00 | CERAMIC CHIP | 220PF | 5% | 50V |
| C139 | 1-163-125-00 | CERAMIC CHIP | 220PF | 5% | 50V |
| C140 | 1-163-125-00 | CERAMIC CHIP | 220PF | 5% | 50V |
| C141 | 1-127-861-11 | CERAMIC CHIP | 2.2uF | 10% | 16V |
| C142 | 1-127-861-11 | CERAMIC CHIP | 2.2uF | 10% | 16V |
| C143 | 1-162-919-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C144 | 1-162-919-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C145 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C146 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C200 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C201 | 1-163-137-00 | CERAMIC CHIP | 680PF | 5% | 50V |
| C202 | 1-163-137-00 | CERAMIC CHIP | 680PF | 5% | 50V |
| C203 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C204 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C205 | 1-163-137-00 | CERAMIC CHIP | 680PF | 5% | 50V |
| C206 | 1-163-137-00 | CERAMIC CHIP | 680PF | 5% | 50V |
| C207 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C208 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C209 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C210 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C211 | 1-115-339-11 | CERAMIC CHIP | 0.1uF | 10% | 50V |
| C212 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C213 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C214 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C215 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C216 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C217 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C218 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C219 | 1-165-901-11 | ELECT BL C | 2.2uF | 20% | 35V |
| C220 | 1-165-901-11 | ELECT BL C | 2.2uF | 20% | 35V |
| C221 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C222 | 1-165-901-11 | ELECT BL C | 2.2uF | 20% | 35V |
| C223 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C224 | 1-165-901-11 | ELECT BL C | 2.2uF | 20% | 35V |
| C225 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C226 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C227 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C228 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C229 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C230 | 1-165-898-11 | ELECT BL C | 1uF | 20% | 35V |
| C231 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C232 | 1-165-898-11 | ELECT BL C | 1uF | 20% | 35V |
| C233 | 1-163-125-00 | CERAMIC CHIP | 220PF | 5% | 50V |
| C234 | 1-163-125-00 | CERAMIC CHIP | 220PF | 5% | 50V |
| C235 | 1-163-125-00 | CERAMIC CHIP | 220PF | 5% | 50V |
| C236 | 1-162-919-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C237 | 1-162-919-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C238 | 1-127-573-11 | CERAMIC CHIP | 1uF | 10% | 16V |
| C239 | 1-127-573-11 | CERAMIC CHIP | 1uF | 10% | 16V |
| C240 | 1-127-573-11 | CERAMIC CHIP | 1uF | 10% | 16V |
| C241 | 1-127-573-11 | CERAMIC CHIP | 1uF | 10% | 16V |
| C242 | 1-127-573-11 | CERAMIC CHIP | 1uF | 10% | 16V |
| C243 | 1-127-573-11 | CERAMIC CHIP | 1uF | 10% | 16V |
| C246 | 1-127-573-11 | CERAMIC CHIP | 1uF | 10% | 16V |
| C300 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF | 5% | 50V |
| C301 | 1-107-823-11 | CERAMIC CHIP | 0.47uF | 10% | 16V |
| C304 | 1-165-900-11 | ELECT BL C | 100uF | 20% | 16V |
| C305 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C306 | 1-115-339-11 | CERAMIC CHIP | 0.1uF | 10% | 50V |
| C307 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C308 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C310 | 1-165-900-11 | ELECT BL C | 100uF | 20% | 16V |
| C312 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C313 | 1-165-902-11 | ELECT BL C | 22uF | 20% | 16V |
| C314 | 1-165-898-11 | ELECT BL C | 1uF | 20% | 35V |
| C315 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C316 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C318 | 1-135-349-21 | ELECT | 22uF | 20% | 20V |
| C319 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C320 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C321 | 1-165-900-11 | ELECT BL C | 100uF | 20% | 16V |
| C322 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C323 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C324 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C326 | 1-126-204-11 | ELECT CHIP | 47uF | 20% | 16V |

## MAIN

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| C327 | 1-126-193-11 | ELECT | 1uF | 20% | 50V |
| C328 | 1-126-603-11 | ELECT CHIP | 4.7uF | 20% | 35V |
| C329 | 1-126-193-11 | ELECT | 1uF | 20% | 50V |
| C330 | 1-124-779-00 | ELECT CHIP | 10uF | 20% | 16V |
| C333 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C334 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C335 | 1-162-923-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C336 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C371 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C373 | 1-117-681-11 | ELECT CHIP | 100uF | 20% | 16V |
| C374 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C375 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C376 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C377 | 1-117-681-11 | ELECT CHIP | 100uF | 20% | 16V |
| C500 | 1-127-573-11 | CERAMIC CHIP | 1uF | 10% | 16V |
| C501 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C502 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C504 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C505 | 1-165-899-11 | ELECT BL C | 10uF | 20% | 16V |
| C506 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C507 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C508 | 1-163-233-11 | CERAMIC CHIP | 18PF | 5% | 50V |
| C509 | 1-163-233-11 | CERAMIC CHIP | 18PF | 5% | 50V |
| C511 | 1-124-779-00 | ELECT CHIP | 10uF | 20% | 16V |
| C512 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C513 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C514 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C517 | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C518 | 1-164-874-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C519 | 1-164-874-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C520 | 1-127-573-11 | CERAMIC CHIP | 1uF | 10% | 16V |
| C521 | 1-164-874-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C522 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C523 | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C524 | 1-164-870-11 | CERAMIC CHIP | 68PF | 5% | 50V |
| C525 | 1-164-874-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C526 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C527 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C528 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C529 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C530 | 1-125-777-11 | CERAMIC CHIP | 0.1uF | 10% | 10V |
| C531 | 1-135-349-21 | ELECT | 22uF | 20% | 20V |
| C532 | 1-126-204-11 | ELECT CHIP | 47uF | 20% | 16V |
| C533 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C534 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C535 | 1-165-900-11 | ELECT BL C | 100uF | 20% | 16V |
| C536 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C537 | 1-125-837-11 | CERAMIC CHIP | 1uF | 10% | 6.3V |
| C538 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C539 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C540 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C541 | 1-162-919-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C542 | 1-162-917-11 | CERAMIC CHIP | 15PF | 5% | 50V |
| C550 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C551 | 1-125-777-11 | CERAMIC CHIP | 0.1uF | 10% | 10V |
| C552 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C553 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C555 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C556 | 1-162-962-11 | CERAMIC CHIP | 470PF | 10% | 50V |
| C557 | 1-164-816-11 | CERAMIC CHIP | 220PF | 2% | 50V |
| C558 | 1-162-918-11 | CERAMIC CHIP | 18PF | 5% | 50V |
| C559 | 1-162-918-11 | CERAMIC CHIP | 18PF | 5% | 50V |
| C562 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C563 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C564 | 1-162-919-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C565 | 1-162-919-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C566 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C567 | 1-124-779-00 | ELECT CHIP | 10uF | 20% | 16V |
| C568 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C569 | 1-125-777-11 | CERAMIC CHIP | 0.1uF | 10% | 10V |
| C570 | 1-125-777-11 | CERAMIC CHIP | 0.1uF | 10% | 10V |
| C571 | 1-125-837-11 | CERAMIC CHIP | 1uF | 10% | 6.3V |
| C572 | 1-125-777-11 | CERAMIC CHIP | 0.1uF | 10% | 10V |
| C573 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C580 | 1-115-416-11 | CERAMIC CHIP | 0.001uF | 5% | 25V |
| C581 | 1-115-416-11 | CERAMIC CHIP | 0.001uF | 5% | 25V |
| C631 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C640 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C641 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C642 | 1-117-681-11 | ELECT CHIP | 100uF | 20% | 16V |
| C643 | 1-128-257-21 | ELECT CHIP | 33uF | 20% | 10V |
| C644 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C645 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C646 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C647 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C648 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C649 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C650 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C660 | 1-125-777-11 | CERAMIC CHIP | 0.1uF | 10% | 10V |
| C670 | 1-125-837-11 | CERAMIC CHIP | 1uF | 10% | 6.3V |
| C671 | 1-125-837-11 | CERAMIC CHIP | 1uF | 10% | 6.3V |
| C693 | 1-126-204-11 | ELECT CHIP | 47uF | 20% | 16V |

< CONNECTOR >

| | | | |
|---|---|---|---|
| CN3 | 1-564-506-11 | PLUG, CONNECTOR 3P | |
| * CN4 | 1-506-984-11 | PIN, CONNECTOR (PC BOARD) 2P | |
| CN331 | 1-784-396-31 | CONNECTOR, FFC/FPC 40P | |
| CN332 | 1-774-731-21 | PIN, CONNECTOR (PC BOARD) 5P | |
| CN630 | 1-580-907-31 | PLUG, CONNECTOR | (BUS CONTROL IN (FOR SONY BUS)) |
| * CN640 | 1-695-320-21 | PIN, CONNECTOR (1.5mm) (SMD) 2P | |
| CN670 | 1-770-352-11 | CONNECTOR, FPC 30P | |
| CNP370 | 1-815-260-11 | CONNECTOR, BOAR TO BOARD 30P | |

< DIODE >

| | | |
|---|---|---|
| D1 | 8-719-977-03 | DIODE MA8056-H-TX |
| D101 | 8-719-941-23 | DIODE DA204UT106 |
| D102 | 8-719-941-23 | DIODE DA204UT106 |
| D103 | 8-719-941-23 | DIODE DA204UT106 |
| D301 | 8-719-801-78 | DIODE MA152WK-TX |
| D304 | 8-719-404-50 | DIODE MA111-TX |
| D305 | 8-719-404-50 | DIODE MA111-TX |
| D370 | 8-719-977-03 | DIODE MA8056-H-TX |
| D371 | 8-719-404-50 | DIODE MA111-TX |
| D372 | 8-719-017-62 | DIODE MA8068-L-TX |

**MAIN**

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| D373 | 8-719-404-50 | DIODE MA111-TX | |
| D550 | 8-719-404-50 | DIODE MA111-TX | |
| D551 | 8-719-404-50 | DIODE MA111-TX | |
| D552 | 8-719-404-50 | DIODE MA111-TX | |
| D631 | 8-719-422-64 | DIODE MA8062-M-TX | |
| D632 | 8-719-057-80 | DIODE MA8180-M-TX | |
| D633 | 8-719-057-80 | DIODE MA8180-M-TX | |
| D634 | 8-719-420-51 | DIODE MA729-TX | |
| D635 | 8-719-057-80 | DIODE MA8180-M-TX | |
| D636 | 8-719-801-78 | DIODE MA152WK-TX | |
| D637 | 8-719-404-50 | DIODE MA111-TX | |
| D638 | 8-719-404-50 | DIODE MA111-TX | |
| D639 | 8-719-820-05 | DIODE MA152WA-TX | |
| D640 | 8-719-801-78 | DIODE MA152WK-TX | |
| D641 | 8-719-820-05 | DIODE MA152WA-TX | |
| D670 | 8-719-064-08 | DIODE HZU6.8B2TRF | |
| D671 | 8-719-068-83 | DIODE MAZL068D0LS0-TX/L | |
| D672 | 8-719-068-83 | DIODE MAZL068D0LS0-TX/L | |
| D673 | 8-719-068-83 | DIODE MAZL068D0LS0-TX/L | |
| D674 | 8-719-068-83 | DIODE MAZL068D0LS0-TX/L | |
| D675 | 8-719-064-08 | DIODE HZU6.8B2TRF | |
| D680 | 8-719-404-50 | DIODE MA111-TX | |
| | | < FERRITE BEAD > | |
| FB501 | 1-414-598-11 | FERRITE 0uH | |
| FB502 | 1-500-240-22 | FERRITE 0uH | |
| FB503 | 1-414-595-11 | FERRITE 0uH | |
| FB504 | 1-414-595-11 | FERRITE 0uH | |
| FB505 | 1-414-235-22 | FERRITE 0uH | |
| FB506 | 1-414-235-22 | FERRITE 0uH | |
| FB507 | 1-414-760-21 | FERRITE, EMI (SMD) | |
| FB508 | 1-414-760-21 | FERRITE, EMI (SMD) | |
| FB509 | 1-414-760-21 | FERRITE, EMI (SMD) | |
| | | < IC > | |
| IC2 | 8-759-643-48 | IC BA00ASFP-E2 | |
| IC100 | 8-759-422-21 | IC NJM4580V (TE2) | |
| IC101 | 8-759-385-17 | IC NJM4580E (TE2) | |
| IC102 | 8-759-422-21 | IC NJM4580V (TE2) | |
| IC103 | 8-759-385-17 | IC NJM4580E (TE2) | |
| IC104 | 8-759-422-21 | IC NJM4580V (TE2) | |
| IC200 | 8-759-422-21 | IC NJM4580V (TE2) | |
| IC201 | 8-759-422-21 | IC NJM4580V (TE2) | |
| IC202 | 8-759-385-17 | IC NJM4580E (TE2) | |
| IC300 | 8-759-653-27 | IC TDA7402TR | |
| IC301 | 8-759-476-23 | IC BA08SFP-E2 | |
| IC302 | 8-759-363-28 | IC TC7660SEOA713 | |
| IC303 | 8-759-331-71 | IC NJM4558E (TE2) | |
| IC500 | 8-752-402-48 | IC CXD2727Q | |
| IC501 | 8-759-486-55 | IC NJM2370U33-TE2 | |
| IC502 | 8-759-486-55 | IC NJM2370U33-TE2 | |
| IC503 | 8-759-485-79 | IC TC7SET08FU (TE85R) | |
| IC504 | 8-759-524-10 | IC TC74VHC157FT (EL) | |
| IC550 | 6-801-937-01 | IC MB90574CPMT-G-382-BNDE1 | |
| IC551 | 8-759-571-49 | IC XC61AN4102PR | |
| IC552 | 8-759-495-76 | IC RN5VD33AA-TL | |
| IC553 | 8-759-591-84 | IC EW-410-FT | |
| IC630 | 8-759-449-89 | IC BA8270F-E2 | |
| IC640 | 8-759-476-22 | IC BA07SFP-E2 | |
| IC641 | 8-759-580-33 | IC BA6288FS-E2 | |
| IC642 | 8-759-701-01 | IC NJM2904M (TE2) | |
| IC660 | 8-759-830-17 | IC RRX9000-0401R#01 | |
| | | < COIL > | |
| L4 | 1-412-058-11 | INDUCTOR CHIP 10uH | |
| L5 | 1-412-058-11 | INDUCTOR CHIP 10uH | |
| L300 | 1-412-058-11 | INDUCTOR CHIP 10uH | |
| L301 | 1-412-058-11 | INDUCTOR CHIP 10uH | |
| L550 | 1-412-058-11 | INDUCTOR CHIP 10uH | |
| | | < JACK > | |
| PNJ1 | 1-774-700-21 | JACK, PIN 6P (BUS AUDIO IN, FRONT/REAR AUDIO OUT) | |
| PNJ2 | 1-774-698-21 | JACK, PIN 2P (AUX IN) | |
| | | < TRANSISTOR > | |
| Q2 | 8-729-920-85 | TRANSISTOR 2SD1664-T101-QR | |
| Q100 | 8-729-920-21 | TRANSISTOR DTC314TK-T-146 | |
| Q101 | 8-729-920-21 | TRANSISTOR DTC314TK-T-146 | |
| Q103 | 8-729-400-56 | TRANSISTOR 2SD1328-T-TX | |
| Q104 | 8-729-400-56 | TRANSISTOR 2SD1328-T-TX | |
| Q105 | 8-729-400-56 | TRANSISTOR 2SD1328-T-TX | |
| Q200 | 8-729-920-21 | TRANSISTOR DTC314TK-T-146 | |
| Q201 | 8-729-920-21 | TRANSISTOR DTC314TK-T-146 | |
| Q202 | 8-729-400-56 | TRANSISTOR 2SD1328-T-TX | |
| Q203 | 8-729-400-56 | TRANSISTOR 2SD1328-T-TX | |
| Q204 | 8-729-400-56 | TRANSISTOR 2SD1328-T-TX | |
| Q300 | 8-729-106-60 | TRANSISTOR 2SB1132-T101-QR | |
| Q303 | 8-729-144-85 | TRANSISTOR 2SK1133-T1B | |
| Q305 | 8-729-421-19 | TRANSISTOR UN2213-TX | |
| Q306 | 8-729-424-18 | TRANSISTOR UN2113-TX | |
| Q307 | 8-729-421-22 | TRANSISTOR UN2211-TX | |
| Q308 | 8-729-230-49 | TRANSISTOR 2SC2712-YG-TE85L | |
| Q309 | 8-729-230-49 | TRANSISTOR 2SC2712-YG-TE85L | |
| Q310 | 8-729-230-49 | TRANSISTOR 2SC2712-YG-TE85L | |
| Q311 | 8-729-427-83 | TRANSISTOR XP6501- (TX).SO | |
| Q313 | 8-729-049-13 | TRANSISTOR UPA1853GR-9JG-E1 | |
| Q314 | 8-729-429-92 | TRANSISTOR XN1211-TX | |
| Q372 | 8-729-020-67 | TRANSISTOR XN1A312-TX | |
| Q373 | 8-729-807-12 | TRANSISTOR 2SD1802FAT-TL | |
| Q374 | 8-729-429-92 | TRANSISTOR XN1211-TX | |
| Q375 | 8-729-053-97 | TRANSISTOR 2SB1449R/S-DL | |
| Q376 | 8-729-230-49 | TRANSISTOR 2SC2712-YG-TE85L | |
| Q500 | 8-729-020-67 | TRANSISTOR XN1A312-TX | |
| Q501 | 8-729-020-67 | TRANSISTOR XN1A312-TX | |
| Q551 | 8-729-424-08 | TRANSISTOR UN2111-TX | |
| Q631 | 8-729-421-22 | TRANSISTOR UN2211-TX | |
| Q632 | 8-729-424-18 | TRANSISTOR UN2113-TX | |
| Q640 | 8-729-216-22 | TRANSISTOR 2SA1162-YG-TE85L | |
| Q641 | 8-729-230-49 | TRANSISTOR 2SC2712-YG-TE85L | |
| Q642 | 8-729-421-22 | TRANSISTOR UN2211-TX | |
| Q672 | 8-729-106-60 | TRANSISTOR 2SB1132-T101-QR | |
| Q673 | 8-729-421-22 | TRANSISTOR UN2211-TX | |
| Q674 | 8-729-421-22 | TRANSISTOR UN2211-TX | |
| Q675 | 8-729-106-60 | TRANSISTOR 2SB1132-T101-QR | |
| Q676 | 8-729-025-48 | TRANSISTOR XN4381-TX | |

## MAIN

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| | | < RESISTOR > | | | |
| R7 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R8 | 1-218-728-11 | METAL CHIP | 33K | 0.5% | 1/16W |
| R9 | 1-218-710-11 | METAL CHIP | 5.6K | 0.5% | 1/16W |
| R10 | 1-218-867-11 | RES-CHIP | 6.8K | 5% | 1/10W |
| R11 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R12 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/10W |
| R13 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R14 | 1-216-295-11 | SHORT CHIP | 0 | | |
| R15 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R16 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R17 | 1-218-969-11 | RES-CHIP | 22K | 5% | 1/16W |
| R20 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R21 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R31 | 1-216-295-11 | SHORT CHIP | 0 | | |
| R100 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R101 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R102 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R103 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R104 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R105 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R106 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R107 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R108 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R109 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R110 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R111 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R112 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R113 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R114 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R115 | 1-218-734-11 | METAL CHIP | 56K | 0.5% | 1/16W |
| R116 | 1-216-683-11 | METAL CHIP | 22K | 0.5% | 1/10W |
| R117 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R118 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R119 | 1-216-683-11 | METAL CHIP | 22K | 0.5% | 1/10W |
| R120 | 1-218-734-11 | METAL CHIP | 56K | 0.5% | 1/16W |
| R121 | 1-208-803-11 | RES-CHIP | 7.5K | 2% | 1/10W |
| R122 | 1-208-453-41 | RES-CHIP | 4.7K | 2% | 1/10W |
| R123 | 1-208-453-41 | RES-CHIP | 4.7K | 2% | 1/10W |
| R124 | 1-208-803-11 | RES-CHIP | 7.5K | 2% | 1/10W |
| R125 | 1-216-683-11 | METAL CHIP | 22K | 0.5% | 1/10W |
| R126 | 1-216-693-11 | METAL CHIP | 56K | 0.5% | 1/10W |
| R127 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R128 | 1-208-526-41 | RES-CHIP | 47K | 2% | 1/10W |
| R129 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R130 | 1-208-526-41 | RES-CHIP | 47K | 2% | 1/10W |
| R131 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R132 | 1-208-526-41 | RES-CHIP | 47K | 2% | 1/10W |
| R133 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R134 | 1-208-526-41 | RES-CHIP | 47K | 2% | 1/10W |
| R135 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R136 | 1-208-526-41 | RES-CHIP | 47K | 2% | 1/10W |
| R137 | 1-216-651-11 | METAL CHIP | 1K | 0.5% | 1/10W |
| R138 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R139 | 1-216-651-11 | METAL CHIP | 1K | 0.5% | 1/10W |
| R140 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R141 | 1-216-665-11 | METAL CHIP | 3.9K | 0.5% | 1/10W |
| R142 | 1-216-665-11 | METAL CHIP | 3.9K | 0.5% | 1/10W |
| R143 | 1-216-665-11 | METAL CHIP | 3.9K | 0.5% | 1/10W |
| R144 | 1-216-669-11 | METAL CHIP | 5.6K | 0.5% | 1/10W |
| R145 | 1-216-065-00 | RES-CHIP | 4.7K | 5% | 1/10W |
| R146 | 1-216-065-00 | RES-CHIP | 4.7K | 5% | 1/10W |
| R147 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R148 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R149 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R150 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R153 | 1-218-446-11 | RES-CHIP | 1 | 5% | 1/10W |
| R200 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R201 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R202 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R203 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R204 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R205 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R206 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R207 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R208 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R209 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R210 | 1-218-734-11 | METAL CHIP | 56K | 0.5% | 1/16W |
| R211 | 1-216-683-11 | METAL CHIP | 22K | 0.5% | 1/10W |
| R212 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R213 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R214 | 1-216-683-11 | METAL CHIP | 22K | 0.5% | 1/10W |
| R215 | 1-218-734-11 | METAL CHIP | 56K | 0.5% | 1/16W |
| R216 | 1-208-803-11 | RES-CHIP | 7.5K | 2% | 1/10W |
| R217 | 1-208-453-41 | RES-CHIP | 4.7K | 2% | 1/10W |
| R218 | 1-208-453-41 | RES-CHIP | 4.7K | 2% | 1/10W |
| R219 | 1-208-803-11 | RES-CHIP | 7.5K | 2% | 1/10W |
| R220 | 1-216-693-11 | METAL CHIP | 56K | 0.5% | 1/10W |
| R221 | 1-216-683-11 | METAL CHIP | 22K | 0.5% | 1/10W |
| R222 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R223 | 1-208-526-41 | RES-CHIP | 47K | 2% | 1/10W |
| R224 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R225 | 1-208-526-41 | RES-CHIP | 47K | 2% | 1/10W |
| R226 | 1-216-065-00 | RES-CHIP | 4.7K | 5% | 1/10W |
| R227 | 1-216-065-00 | RES-CHIP | 4.7K | 5% | 1/10W |
| R228 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R229 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R230 | 1-208-526-41 | RES-CHIP | 47K | 2% | 1/10W |
| R231 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R232 | 1-208-526-41 | RES-CHIP | 47K | 2% | 1/10W |
| R233 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R234 | 1-208-526-41 | RES-CHIP | 47K | 2% | 1/10W |
| R235 | 1-216-651-11 | METAL CHIP | 1K | 0.5% | 1/10W |
| R236 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R237 | 1-216-651-11 | METAL CHIP | 1K | 0.5% | 1/10W |
| R238 | 1-216-675-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R239 | 1-216-665-11 | METAL CHIP | 3.9K | 0.5% | 1/10W |
| R240 | 1-216-665-11 | METAL CHIP | 3.9K | 0.5% | 1/10W |
| R241 | 1-216-665-11 | METAL CHIP | 3.9K | 0.5% | 1/10W |
| R242 | 1-216-669-11 | METAL CHIP | 5.6K | 0.5% | 1/10W |
| R243 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R244 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R245 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R246 | 1-218-692-11 | METAL CHIP | 1K | 0.5% | 1/16W |
| R247 | 1-218-692-11 | METAL CHIP | 1K | 0.5% | 1/16W |

**MAIN**

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R248 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R300 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/10W |
| R302 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R303 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R304 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R305 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R306 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R307 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R308 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R309 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R312 | 1-218-696-11 | METAL CHIP | 1.5K | 0.5% | 1/16W |
| R313 | 1-218-692-11 | METAL CHIP | 1K | 0.5% | 1/16W |
| R314 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R315 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R316 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R317 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R318 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R319 | 1-216-295-11 | SHORT CHIP | 0 | | |
| R320 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R321 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R322 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R326 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/10W |
| R328 | 1-216-017-00 | RES-CHIP | 47 | 5% | 1/10W |
| R329 | 1-216-295-11 | SHORT CHIP | 0 | | |
| R330 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R331 | 1-216-815-11 | METAL CHIP | 330 | 5% | 1/10W |
| R332 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R333 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R334 | 1-218-969-11 | RES-CHIP | 22K | 5% | 1/16W |
| R335 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R336 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R337 | 1-216-065-00 | RES-CHIP | 4.7K | 5% | 1/10W |
| R338 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R339 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R340 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R341 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R342 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R343 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R344 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R345 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R370 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R373 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R374 | 1-216-065-00 | RES-CHIP | 4.7K | 5% | 1/10W |
| R500 | 1-216-129-00 | METAL CHIP | 2.2M | 5% | 1/10W |
| R501 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R502 | 1-216-043-00 | RES-CHIP | 560 | 5% | 1/10W |
| R504 | 1-216-125-00 | METAL CHIP | 1.5M | 5% | 1/10W |
| R505 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R506 | 1-218-965-11 | RES-CHIP | 10K | 5% | 1/16W |
| R507 | 1-218-953-11 | RES-CHIP | 1K | 5% | 1/16W |
| R508 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/10W |
| R509 | 1-218-949-11 | RES-CHIP | 470 | 5% | 1/16W |
| R510 | 1-218-953-11 | RES-CHIP | 1K | 5% | 1/16W |
| R511 | 1-218-947-11 | RES-CHIP | 330 | 5% | 1/16W |
| R512 | 1-218-947-11 | RES-CHIP | 330 | 5% | 1/16W |
| R514 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R549 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R550 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R551 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R552 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R553 | 1-218-953-11 | RES-CHIP | 1K | 5% | 1/16W |
| R554 | 1-218-957-11 | RES-CHIP | 2.2K | 5% | 1/16W |
| R555 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R556 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R557 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R558 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R559 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R560 | 1-218-947-11 | RES-CHIP | 330 | 5% | 1/16W |
| R562 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R563 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R564 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R565 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R566 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R567 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R568 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R569 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R570 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R571 | 1-218-953-11 | RES-CHIP | 1K | 5% | 1/16W |
| R572 | 1-218-957-11 | RES-CHIP | 2.2K | 5% | 1/16W |
| R573 | 1-218-957-11 | RES-CHIP | 2.2K | 5% | 1/16W |
| R574 | 1-218-953-11 | RES-CHIP | 1K | 5% | 1/16W |
| R575 | 1-218-990-11 | SHORT CHIP | 0 | | |
| R576 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R577 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R578 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R579 | 1-218-941-81 | RES-CHIP | 100 | 5% | 1/16W |
| R580 | 1-218-716-11 | METAL CHIP | 10K | 0.5% | 1/16W |
| R581 | 1-218-716-11 | METAL CHIP | 10K | 0.5% | 1/16W |
| R582 | 1-218-990-11 | SHORT CHIP | 0 | | |
| R583 | 1-218-981-11 | RES-CHIP | 220K | 5% | 1/16W |
| R584 | 1-218-981-11 | RES-CHIP | 220K | 5% | 1/16W |
| R585 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R586 | 1-218-981-11 | RES-CHIP | 220K | 5% | 1/16W |
| R587 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R588 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R589 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R590 | 1-218-965-11 | RES-CHIP | 10K | 5% | 1/16W |
| R591 | 1-218-965-11 | RES-CHIP | 10K | 5% | 1/16W |
| R592 | 1-218-990-11 | SHORT CHIP | 0 | | |
| R593 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R594 | 1-218-973-11 | RES-CHIP | 47K | 5% | 1/16W |
| R595 | 1-218-990-11 | SHORT CHIP | 0 | | |
| R596 | 1-218-945-11 | RES-CHIP | 220 | 5% | 1/16W |
| R597 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R598 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R599 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R603 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R604 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R605 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R607 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R610 | 1-218-985-11 | RES-CHIP | 470K | 5% | 1/16W |
| R611 | 1-218-965-11 | RES-CHIP | 10K | 5% | 1/16W |
| R631 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R632 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R633 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/10W |

## MAIN POWER

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R634 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R640 | 1-216-097-11 | RES-CHIP | 100K | 5% | 1/10W |
| R641 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R642 | 1-216-304-11 | METAL CHIP | 3.3 | 5% | 1/10W |
| R643 | 1-216-304-11 | METAL CHIP | 3.3 | 5% | 1/10W |
| R644 | 1-216-304-11 | METAL CHIP | 3.3 | 5% | 1/10W |
| R645 | 1-218-965-11 | RES-CHIP | 10K | 5% | 1/16W |
| R646 | 1-218-965-11 | RES-CHIP | 10K | 5% | 1/16W |
| R647 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/10W |
| R648 | 1-218-965-11 | RES-CHIP | 10K | 5% | 1/16W |
| R649 | 1-216-304-11 | METAL CHIP | 3.3 | 5% | 1/10W |
| R660 | 1-216-857-11 | METAL CHIP | 1M | 5% | 1/16W |
| R661 | 1-218-949-11 | RES-CHIP | 470 | 5% | 1/16W |
| R662 | 1-218-953-11 | RES-CHIP | 1K | 5% | 1/16W |
| R664 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R665 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R666 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R667 | 1-218-977-11 | RES-CHIP | 100K | 5% | 1/16W |
| R669 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/10W |
| R670 | 1-218-965-11 | RES-CHIP | 10K | 5% | 1/16W |
| R671 | 1-218-990-11 | SHORT CHIP | 0 | | |
| R673 | 1-216-089-11 | RES-CHIP | 47K | 5% | 1/10W |
| R674 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R675 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R676 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R679 | 1-216-065-00 | RES-CHIP | 4.7K | 5% | 1/10W |
| R681 | 1-218-963-11 | RES-CHIP | 6.8K | 5% | 1/16W |
| | | < SWITCH > | | | |
| S501 | 1-571-478-11 | SWITCH, SLIDE (FREQUENCY SELECT) | | | |
| S640 | 1-572-688-42 | SWITCH, PUSH (1 KEY) (FRONT PANEL OPEN DETECT) | | | |
| S641 | 1-572-288-21 | SWITCH, PUSH (FRONT PANEL CLOSE DETECT) | | | |
| | | < THERMISTOR > | | | |
| TH630 | 1-801-792-21 | THERMISTOR, POSITIVE | | | |
| | | < TUNER UNIT > | | | |
| TU1 | A-3220-812-A | TUNER UNIT (TUX-020) | | | |
| | | < VIBRATOR > | | | |
| X500 | 1-767-408-21 | VIBRATOR, CRYSTAL (16.9344MHz) | | | |
| X550 | 1-567-098-41 | VIBRATOR, CRYSTAL (32.768kHz) | | | |
| X551 | 1-767-280-21 | VIBRATOR, CRYSTAL (3.686MHz) | | | |
| X660 | 1-767-359-11 | VIBRATOR, CERAMIC (4MHz) | | | |
| ********** | | | | | |
| | A-3274-480-A | POWER BOARD, COMPLETE | | | |
| | | ********** | | | |
| * | 3-022-317-01 | BRACKET (AMP) | | | |
| | 3-233-364-01 | HEAT SINK | | | |
| | 7-685-794-09 | SCREW +PTT 2.6X10 (S) | | | |
| | | < CAPACITOR > | | | |
| C400 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C401 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| C402 | 1-128-528-11 | ELECT | 470uF | 20% | 25V |
| C403 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C405 | 1-115-416-11 | CERAMIC CHIP | 0.001uF | 5% | 25V |
| C406 | 1-117-681-11 | ELECT CHIP | 100uF | 20% | 16V |
| C407 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C408 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C409 | 1-115-759-11 | ELECT | 330uF | 20% | 16V |
| C410 | 1-109-982-11 | CERAMIC CHIP | 1uF | 10% | 10V |
| C411 | 1-115-416-11 | CERAMIC CHIP | 0.001uF | 5% | 25V |
| C412 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C413 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C414 | 1-164-217-11 | CERAMIC CHIP | 150PF | 5% | 50V |
| C417 | 1-115-759-11 | ELECT | 330uF | 20% | 16V |
| C418 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C419 | 1-125-710-11 | DOUBLE LAYER | 0.1F | | 5.5V |
| C420 | 1-117-681-11 | ELECT CHIP | 100uF | 20% | 16V |
| C421 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C422 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C423 | 1-117-681-11 | ELECT CHIP | 100uF | 20% | 16V |
| C424 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C425 | 1-117-681-11 | ELECT CHIP | 100uF | 20% | 16V |
| C426 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C427 | 1-117-681-11 | ELECT CHIP | 100uF | 20% | 16V |
| C428 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C429 | 1-162-959-11 | CERAMIC CHIP | 330PF | 5% | 50V |
| C430 | 1-109-982-11 | CERAMIC CHIP | 1uF | 10% | 10V |
| C431 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C432 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C436 | 1-135-349-21 | ELECT | 22uF | 20% | 20V |
| C437 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C438 | 1-119-795-11 | ELECT | 3300uF | 20% | 16V |
| C439 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C440 | 1-125-827-11 | CERAMIC CHIP | 1uF | 10% | 25V |
| C441 | 1-125-827-11 | CERAMIC CHIP | 1uF | 10% | 25V |
| C442 | 1-126-603-11 | ELECT CHIP | 4.7uF | 20% | 35V |
| C443 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C444 | 1-137-683-11 | FILM CHIP | 0.22uF | 20% | 16V |
| C445 | 1-137-683-11 | FILM CHIP | 0.22uF | 20% | 16V |
| C446 | 1-137-683-11 | FILM CHIP | 0.22uF | 20% | 16V |
| C447 | 1-137-683-11 | FILM CHIP | 0.22uF | 20% | 16V |
| C448 | 1-125-891-11 | CERAMIC CHIP | 0.47uF | 10% | 10V |
| C449 | 1-126-204-11 | ELECT CHIP | 47uF | 20% | 16V |
| C450 | 1-162-959-11 | CERAMIC CHIP | 330PF | 5% | 50V |
| C451 | 1-162-959-11 | CERAMIC CHIP | 330PF | 5% | 50V |
| C453 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C454 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C455 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C456 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C457 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C458 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C459 | 1-127-573-11 | CERAMIC CHIP | 1uF | 10% | 16V |
| C461 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C462 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C463 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C464 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C465 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C466 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C467 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| C468 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C469 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C470 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C474 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C475 | 1-162-915-11 | CERAMIC CHIP | 10PF | 5% | 50V |
| C476 | 1-162-915-11 | CERAMIC CHIP | 10PF | 5% | 50V |
| C477 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C478 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C479 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C480 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C481 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C482 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C483 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C484 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C1001 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C1002 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| | | < CONNECTOR > | | | |
| CN400 | 1-564-707-11 | PIN, CONNECTOR (SMALL TYPE) 5P | | | |
| CN401 | 1-793-336-11 | CONNECTOR, BOARD TO TOARD 6P | | | |
| * CN402 | 1-569-481-11 | CONNECTOR, FPC 30P | | | |
| CN403 | 1-784-396-31 | CONNECTOR, FFC/FPC 40P | | | |
| CNP400 | 1-793-277-11 | PLUG, CONNECTOR 16P | | | |
| | | < DIODE > | | | |
| D400 | 8-719-404-50 | DIODE | MA111-TX | | |
| D401 | 8-719-055-30 | DIODE | D1FS4A-TA | | |
| D402 | 8-719-055-30 | DIODE | D1FS4A-TA | | |
| D403 | 8-719-422-62 | DIODE | MA8062-L-TX | | |
| D404 | 8-719-055-30 | DIODE | D1FS4A-TA | | |
| D405 | 8-719-055-30 | DIODE | D1FS4A-TA | | |
| D406 | 8-719-404-50 | DIODE | MA111-TX | | |
| D407 | 8-719-055-30 | DIODE | D1FS4A-TA | | |
| D410 | 8-719-423-35 | DIODE | MA8120-H-TX | | |
| D411 | 8-719-055-30 | DIODE | D1FS4A-TA | | |
| D412 | 8-719-404-50 | DIODE | MA111-TX | | |
| D413 | 8-719-313-73 | DIODE | SFPB-52V | | |
| D414 | 8-719-313-73 | DIODE | SFPB-52V | | |
| D415 | 8-719-313-73 | DIODE | SFPB-52V | | |
| D416 | 8-719-313-73 | DIODE | SFPB-52V | | |
| D420 | 8-719-064-08 | DIODE | HZU6.8B2TRF | | |
| D421 | 8-719-049-38 | DIODE | 1N5404TU | | |
| D422 | 8-719-404-50 | DIODE | MA111-TX | | |
| D431 | 8-719-055-30 | DIODE | D1FS4A-TA | | |
| | | < FERRITE BEAD > | | | |
| FB401 | 1-414-595-11 | FERRITE | 0uH | | |
| FB402 | 1-216-295-00 | SHORT CHIP | 0 | | |
| FB403 | 1-216-295-00 | SHORT CHIP | 0 | | |
| FB404 | 1-414-235-22 | FERRITE | 0uH | | |
| FB405 | 1-414-235-22 | FERRITE | 0uH | | |
| FB406 | 1-414-235-22 | FERRITE | 0uH | | |
| | | < IC > | | | |
| IC400 | 8-759-990-43 | IC | TL1451ACDB-E20 | | |
| IC401 | 8-759-990-43 | IC | TL1451ACDB-E20 | | |
| IC402 | 8-759-660-96 | IC | TDA7560 | | |
| IC403 | 8-759-525-98 | IC | RN5VL45CA-TL | | |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| | | < COIL > | | | |
| L400 | 1-469-389-21 | INDUCTOR | 47uH | | |
| L401 | 1-469-389-21 | INDUCTOR | 47uH | | |
| L402 | 1-469-388-21 | INDUCTOR | 100uH | | |
| L403 | 1-469-389-21 | INDUCTOR | 47uH | | |
| L404 | 1-419-476-11 | INDUCTOR | 250uH | | |
| | | < TRANSISTOR > | | | |
| Q400 | 8-729-020-67 | TRANSISTOR | XN1A312-TX | | |
| Q402 | 8-729-424-08 | TRANSISTOR | UN2111-TX | | |
| Q403 | 8-729-421-22 | TRANSISTOR | UN2211-TX | | |
| Q405 | 8-729-822-84 | TRANSISTOR | 2SB1202FAT-TL | | |
| Q406 | 8-729-822-84 | TRANSISTOR | 2SB1202FAT-TL | | |
| Q407 | 8-729-230-49 | TRANSISTOR | 2SC2712-YG-TE85L | | |
| Q408 | 8-729-822-84 | TRANSISTOR | 2SB1202FAT-TL | | |
| Q409 | 8-729-421-22 | TRANSISTOR | UN2211-TX | | |
| Q410 | 8-729-421-22 | TRANSISTOR | UN2211-TX | | |
| Q413 | 8-729-421-22 | TRANSISTOR | UN2211-TX | | |
| Q414 | 8-729-807-34 | TRANSISTOR | 2SB1188-T101-QR | | |
| Q415 | 8-729-020-67 | TRANSISTOR | XN1A312-TX | | |
| Q416 | 8-729-807-12 | TRANSISTOR | 2SD1802FAT-TL | | |
| Q417 | 8-729-025-48 | TRANSISTOR | XN4381-TX | | |
| Q450 | 8-729-026-59 | TRANSISTOR | FMY1A-T148 | | |
| Q451 | 8-729-039-28 | TRANSISTOR | HAT1026R-EL | | |
| | | < RESISTOR > | | | |
| R401 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/10W |
| R402 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/10W |
| R403 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R405 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/10W |
| R407 | 1-218-712-11 | METAL CHIP | 6.8K | 0.5% | 1/16W |
| R408 | 1-218-732-11 | METAL CHIP | 47K | 0.5% | 1/16W |
| R409 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R410 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R411 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R413 | 1-218-696-11 | METAL CHIP | 1.5K | 0.5% | 1/16W |
| R414 | 1-218-714-11 | METAL CHIP | 8.2K | 0.5% | 1/16W |
| R415 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R416 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R417 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R418 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R420 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/10W |
| R422 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/10W |
| R423 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/10W |
| R425 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/10W |
| R426 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/10W |
| R427 | 1-218-740-11 | METAL CHIP | 100K | 0.5% | 1/16W |
| R428 | 1-218-721-11 | METAL CHIP | 16K | 0.5% | 1/16W |
| R430 | 1-218-716-11 | METAL CHIP | 10K | 0.5% | 1/16W |
| R431 | 1-218-728-11 | METAL CHIP | 33K | 0.5% | 1/16W |
| R433 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R434 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R435 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R436 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R437 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R439 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R440 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/10W |

## POWER | SENSOR (CD) | SENSOR (MD) | SERVO (CD)

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R441 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R442 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R443 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/10W |
| R445 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R446 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R447 | 1-216-049-11 | RES-CHIP | 1K | 5% | 1/10W |
| R448 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R449 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R450 | 1-216-039-00 | METAL CHIP | 390 | 5% | 1/10W |
| R452 | 1-216-051-00 | METAL CHIP | 1.2K | 5% | 1/10W |
| R453 | 1-216-815-11 | METAL CHIP | 330 | 5% | 1/10W |
| R454 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R458 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R459 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| | | < THERMISTOR > | | | |
| TH400 | 1-803-615-21 | THERMISTOR, POSITIVE | | | |
| TH401 | 1-803-615-21 | THERMISTOR, POSITIVE | | | |

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|---|---|---|---|---|---|
| * | 1-660-797-31 | SENSOR (CD) BOARD | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C10 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | | 25V |
| C11 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | | 25V |
| | | < LED > | | | |
| D10 | 8-719-045-75 | LED CL-200IR-X-TU (LOADING COMPLETION DETECT) | | | |
| D11 | 8-719-045-75 | LED CL-200IR-X-TU (DISC SIZE (8/12cm) DETECT) | | | |
| D12 | 8-719-045-75 | LED CL-200IR-X-TU (DISC IN DETECT) | | | |
| | | < RESISTOR > | | | |
| R10 | 1-216-045-00 | METAL CHIP | 680 | 5% | 1/10W |
| R11 | 1-216-045-00 | METAL CHIP | 680 | 5% | 1/10W |
| R12 | 1-216-045-00 | METAL CHIP | 680 | 5% | 1/10W |
| R13 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| | | < SWITCH > | | | |
| SW1 | 1-529-566-31 | SWITCH, PUSH (1 KEY) (SELF) | | | |

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|---|---|---|---|---|---|
| | A-3326-420-A | SENSOR (MD) BOARD, COMPLETE | | | |
| | | ********** | | | |

For the parts on the SENSOR (MD) board, replace the entire mounted board.

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|---|---|---|---|---|---|
| | A-3283-207-A | SERVO (CD) BOARD, COMPLETE | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C1 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C3 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C4 | 1-104-609-11 | ELECT CHIP | 100uF | 20% | 4V |
| C5 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C6 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C8 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C9 | 1-162-924-11 | CERAMIC CHIP | 56PF | 5% | 50V |
| C10 | 1-162-924-11 | CERAMIC CHIP | 56PF | 5% | 50V |
| C11 | 1-162-909-11 | CERAMIC CHIP | 4PF | 0.25PF | 50V |
| C13 | 1-162-916-11 | CERAMIC CHIP | 12PF | 5% | 50V |
| C14 | 1-125-837-11 | CERAMIC CHIP | 1uF | 10% | 6.3V |
| C15 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C16 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C17 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C18 | 1-162-966-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V |
| C19 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C20 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C21 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C22 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C23 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C24 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C25 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C29 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C30 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C34 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C35 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C36 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C38 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C40 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C41 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C43 | 1-162-967-11 | CERAMIC CHIP | 0.0033uF | 10% | 50V |
| C44 | 1-125-837-11 | CERAMIC CHIP | 1uF | 10% | 6.3V |
| C45 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C55 | 1-162-919-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| | | < CONNECTOR > | | | |
| CN1 | 1-815-352-11 | CONNECTOR, BOARD TO BOARD 30P | | | |
| CN2 | 1-794-153-21 | CONNECTOR, FPC (ZIF)16P | | | |
| CN3 | 1-770-347-21 | CONNECTOR, FPC 6P | | | |
| | | < RESISTOR > | | | |
| FB1 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| FB2 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| FB3 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| FB4 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| | | < IC > | | | |
| IC1 | 8-759-699-98 | IC uPD63711GC-8EU | | | |
| IC2 | 8-759-658-87 | IC BA5810FP-E2 | | | |
| IC3 | 8-759-196-95 | IC TC7SH04F (TE85R) | | | |
| | | < RESISTOR > | | | |
| JR50 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| JR51 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| JR52 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| | | < TRANSISTOR > | | | |
| Q1 | 8-729-904-87 | TRANSISTOR 2SB1197K-T-146-R | | | |
| Q6 | 8-729-037-94 | PHOTO TRANSISTOR CPT-230S-C-TD-BC (DISC IN DETECT) | | | |
| Q7 | 8-729-037-94 | PHOTO TRANSISTOR CPT-230S-C-TD-BC (DISC SIZE (8/12cm) DETECT) | | | |
| Q8 | 8-729-037-94 | PHOTO TRANSISTOR CPT-230S-C-TD-BC (LOADING COMPLETION DETECT) | | | |

# SERVO (CD) SERVO (MD)

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| | | < RESISTOR > | | | |
| R3 | 1-216-797-11 | METAL CHIP | 10 | 5% | 1/10W |
| R5 | 1-218-344-11 | RES-CHIP | 7.5K | 5% | 1/10W |
| R6 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/10W |
| R7 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/10W |
| R8 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/10W |
| R9 | 1-216-840-11 | METAL CHIP | 39K | 5% | 1/10W |
| R10 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/10W |
| R12 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/10W |
| R14 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/10W |
| R15 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/10W |
| R17 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R18 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R19 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R20 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R24 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R25 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R26 | 1-216-797-11 | METAL CHIP | 10 | 5% | 1/10W |
| R29 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/10W |
| R30 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/10W |
| R50 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R51 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R52 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R53 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R54 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R55 | 1-216-806-11 | RES-CHIP | 56 | 5% | 1/10W |
| ********** | | | | | |
| * | A-3326-422-A | SERVO (MD) BOARD, COMPLETE | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C11 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C301 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C305 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C306 | 1-107-823-11 | CERAMIC CHIP | 0.47uF | 10% | 16V |
| C307 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C308 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C309 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C310 | 1-107-823-11 | CERAMIC CHIP | 0.47uF | 10% | 16V |
| C311 | 1-164-245-11 | CERAMIC CHIP | 0.015uF | 10% | 25V |
| C314 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C315 | 1-109-982-11 | CERAMIC CHIP | 1uF | 10% | 10V |
| C316 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C317 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C318 | 1-104-852-11 | TANTALUM CHIP | 22uF | 20% | 10V |
| C319 | 1-104-852-11 | TANTALUM CHIP | 22uF | 20% | 10V |
| C320 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V |
| C321 | 1-162-969-11 | CERAMIC CHIP | 0.0068uF | 10% | 25V |
| C322 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C324 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C325 | 1-110-563-11 | CERAMIC CHIP | 0.068uF | 10% | 16V |
| C326 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C327 | 1-109-982-11 | CERAMIC CHIP | 1uF | 10% | 10V |
| C328 | 1-162-966-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V |
| C329 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V |
| C330 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C331 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| C333 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C336 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C339 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C342 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C343 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C344 | 1-104-852-11 | TANTALUM CHIP | 22uF | 20% | 10V |
| C345 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C346 | 1-104-852-11 | TANTALUM CHIP | 22uF | 20% | 10V |
| C347 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C349 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C350 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C351 | 1-104-852-11 | TANTALUM CHIP | 22uF | 20% | 10V |
| C352 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C353 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C356 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C357 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C358 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C359 | 1-162-923-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C361 | 1-135-259-11 | TANTALUM CHIP | 10uF | 20% | 6.3V |
| C362 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C363 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C365 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C402 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C403 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C501 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C503 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C504 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C505 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C506 | 1-104-852-11 | TANTALUM CHIP | 22uF | 20% | 10V |
| C510 | 1-115-467-11 | CERAMIC CHIP | 0.22uF | 10% | 10V |
| C511 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C513 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C514 | 1-115-467-11 | CERAMIC CHIP | 0.22uF | 10% | 10V |
| C515 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C516 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| | | < CONNECTOR > | | | |
| CN101 | 1-764-441-21 | CONNECTOR, FPC 30P | | | |
| CN102 | 1-573-929-21 | CONNECTOR, FFC/FPC (ZIF) 20P | | | |
| * CN103 | 1-573-920-11 | CONNECTOR, FFC/FPC (ZIF) 11P | | | |
| | | < DIODE > | | | |
| D301 | 8-719-977-03 | DIODE MA8056-M-TX | | | |
| D401 | 8-719-157-93 | DIODE DTZ-TT11-3.0B | | | |
| | | < IC > | | | |
| IC301 | 8-752-404-64 | IC CXD2662R | | | |
| IC302 | 8-752-080-95 | IC CXA2523AR | | | |
| IC303 | 8-759-685-74 | IC BH6518FS-E2 | | | |
| IC304 | 8-759-096-87 | IC TC7WU04FU (TE12R) | | | |
| IC305 | 8-759-040-83 | IC BA6287F | | | |
| IC306 | 8-759-667-04 | IC W194-70G-T2 | | | |
| IC307 | 8-759-671-27 | IC MSM51V4400E-70TS-K | | | |
| IC401 | 8-759-909-71 | IC BA4558F | | | |
| IC501 | 8-752-917-12 | IC CXP84340-225Q | | | |
| IC502 | 8-759-321-61 | IC HD74HC244FP-EL | | | |

## SERVO (MD)

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| | | < COIL > | | | |
| L301 | 1-414-398-11 | INDUCTOR | 10uH | | |
| L302 | 1-414-398-11 | INDUCTOR | 10uH | | |
| L501 | 1-414-398-11 | INDUCTOR | 10uH | | |
| | | < TRANSISTOR > | | | |
| Q301 | 8-729-200-13 | TRANSISTOR | 2SC2712Y-TE85L | | |
| Q302 | 8-729-026-49 | TRANSISTOR | 2SA1037AK-T146-QR | | |
| Q303 | 8-729-120-28 | TRANSISTOR | 2SC2412K-T-146-QR | | |
| Q401 | 8-729-920-85 | TRANSISTOR | 2SD1664-T101-QR | | |
| Q402 | 8-729-106-60 | TRANSISTOR | 2SB1132-T101-QR | | |
| Q403 | 8-729-421-22 | TRANSISTOR | UN2211-TX | | |
| | | < RESISTOR > | | | |
| R301 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R302 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R303 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R304 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R305 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R306 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R307 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R308 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R311 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R313 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R314 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R318 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/10W |
| R319 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R320 | 1-216-855-11 | METAL CHIP | 680K | 5% | 1/16W |
| R324 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R325 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R327 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R328 | 1-216-811-11 | METAL CHIP | 150 | 5% | 1/16W |
| R329 | 1-216-819-11 | METAL CHIP | 680 | 5% | 1/16W |
| R330 | 1-216-853-11 | METAL CHIP | 470K | 5% | 1/16W |
| R331 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R332 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R333 | 1-216-819-11 | METAL CHIP | 680 | 5% | 1/16W |
| R334 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R335 | 1-216-815-11 | METAL CHIP | 330 | 5% | 1/10W |
| R336 | 1-216-853-11 | METAL CHIP | 470K | 5% | 1/16W |
| R337 | 1-216-853-11 | METAL CHIP | 470K | 5% | 1/16W |
| R338 | 1-216-994-11 | RES-CHIP | 13K | 5% | 1/10W |
| R340 | 1-218-739-11 | RES-CHIP | 91K | 5% | 1/10W |
| R342 | 1-216-994-11 | RES-CHIP | 13K | 5% | 1/10W |
| R344 | 1-216-994-11 | RES-CHIP | 13K | 5% | 1/10W |
| R346 | 1-216-842-11 | METAL CHIP | 56K | 5% | 1/16W |
| R348 | 1-218-708-11 | METAL CHIP | 4.7K | 0.5% | 1/16W |
| R349 | 1-216-025-11 | RES-CHIP | 100 | 5% | 1/10W |
| R350 | 1-216-142-00 | RES-CHIP | 4.7 | 5% | 1/8W |
| R351 | 1-218-700-11 | METAL CHIP | 2.2K | 0.5% | 1/16W |
| R352 | 1-218-700-11 | METAL CHIP | 2.2K | 0.5% | 1/16W |
| R353 | 1-218-700-11 | METAL CHIP | 2.2K | 0.5% | 1/16W |
| R354 | 1-216-857-11 | METAL CHIP | 1M | 5% | 1/16W |
| R355 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/10W |
| R356 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/10W |
| R357 | 1-216-017-00 | RES-CHIP | 47 | 5% | 1/10W |
| R358 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R360 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R361 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R362 | 1-216-811-11 | METAL CHIP | 150 | 5% | 1/16W |
| R401 | 1-216-073-00 | RES-CHIP | 10K | 5% | 1/10W |
| R402 | 1-216-065-00 | RES-CHIP | 4.7K | 5% | 1/10W |
| R403 | 1-216-065-00 | RES-CHIP | 4.7K | 5% | 1/10W |
| R404 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R405 | 1-218-692-11 | METAL CHIP | 1K | 0.5% | 1/16W |
| R406 | 1-218-714-11 | METAL CHIP | 8.2K | 0.5% | 1/16W |
| R501 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R502 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R503 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R504 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R505 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R506 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R507 | 1-218-708-11 | METAL CHIP | 4.7K | 0.5% | 1/16W |
| R510 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| R511 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R512 | 1-216-847-11 | METAL CHIP | 150K | 5% | 1/16W |
| R516 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R517 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R518 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R519 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R520 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R521 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R522 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R523 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R524 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/10W |
| R525 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R526 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R527 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R528 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R529 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R531 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R533 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R534 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R535 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R537 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/10W |
| R538 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R539 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R540 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R542 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/10W |
| R547 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/10W |
| | | < COMPOSITION CIRCUIT BLOCK > | | | |
| RB503 | 1-233-412-11 | RES, CHIP NETWORK 1.0K (3216) | | | |
| | | < THERMISTOR > | | | |
| TH501 | 1-810-421-11 | THERMISTOR NTH5G36B103K01TE | | | |
| | | < VIBRATOR > | | | |
| X501 | 1-760-365-11 | VIBRATOR, CERAMIC (10MHz) | | | |

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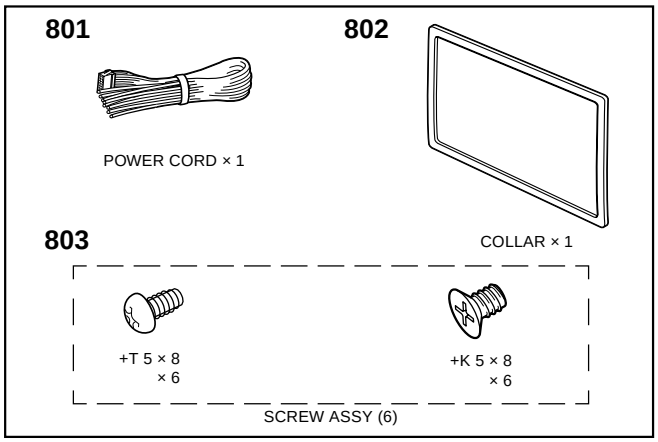
**SL SW** **SUB**

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| * | 1-676-708-11 | SL SW BOARD<br>********** | |
| | | < CONNECTOR > | |
| CN13 | 1-770-347-21 | CONNECTOR, FPC 6P | |
| | | < SWITCH > | |
| SW4 | 1-529-565-41 | SWITCH, PUSH (1 KEY) (LIMIT) | |
| ********** | | | |
| | A-3274-514-A | SUB BOARD, COMPLETE<br>********** | |
| | | < CONNECTOR > | |
| CN820 | 1-793-337-31 | CONNECTOR, BOARD TO BOARD 6P | |
| | | < DIODE > | |
| D818 | 8-719-064-08 | DIODE HZU6.8B2TRF | |
| D819 | 8-719-064-08 | DIODE HZU6.8B2TRF | |
| D820 | 6-500-100-01 | LED CL-220IR-X-TS<br>(MD DISC IN DETECT SENSOR) | |
| D821 | 8-719-079-10 | LED CL-220UB-X-TS<br>(MD DISC SLOT ILLUMINATION) | |
| D822 | 8-719-079-10 | LED CL-220UB-X-TS<br>(MD DISC SLOT ILLUMINATION) | |
| D823 | 8-719-080-04 | LED CL-190UB-X-T (⏏ MD) | |
| D824 | 8-719-080-04 | LED CL-190UB-X-T (⏏ CD) | |
| D825 | 8-719-079-10 | LED CL-220UB-X-TS<br>(CD DISC SLOT ILLUMINATION) | |
| D826 | 8-719-079-10 | LED CL-220UB-X-TS<br>(CD DISC SLOT ILLUMINATION) | |
| | | < PHOTO TRANSISTOR > | |
| Q820 | 8-749-019-64 | PHOTO TRANSISTOR CPT-290S-C-TS-ABCD<br>(MD DISC IN DETECT SENSOR) | |
| | | < RESISTOR > | |
| R820 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| R821 | 1-216-849-11 | METAL CHIP 220K 5% 1/10W | |
| R822 | 1-216-045-00 | METAL CHIP 680 5% 1/10W | |
| R823 | 1-216-045-00 | METAL CHIP 680 5% 1/10W | |
| R824 | 1-216-864-11 | METAL CHIP 0 5% 1/10W | |
| R825 | 1-216-819-11 | METAL CHIP 680 5% 1/16W | |
| R826 | 1-216-045-00 | METAL CHIP 680 5% 1/10W | |
| R827 | 1-216-045-00 | METAL CHIP 680 5% 1/10W | |
| R828 | 1-216-045-00 | METAL CHIP 680 5% 1/10W | |
| R829 | 1-216-045-00 | METAL CHIP 680 5% 1/10W | |
| R830 | 1-216-045-00 | METAL CHIP 680 5% 1/10W | |
| R831 | 1-216-045-00 | METAL CHIP 680 5% 1/10W | |
| R832 | 1-216-045-00 | METAL CHIP 680 5% 1/10W | |
| R833 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| R860 | 1-216-045-00 | METAL CHIP 680 5% 1/10W | |
| R861 | 1-216-045-00 | METAL CHIP 680 5% 1/10W | |
| R862 | 1-216-045-00 | METAL CHIP 680 5% 1/10W | |
| | | < SWITCH > | |
| S820 | 1-771-053-21 | SWITCH, KEY BOARD (⏏ MD) | |
| S821 | 1-771-053-21 | SWITCH, KEY BOARD (⏏ CD) | |
| ********** | | | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| | | MISCELLANEOUS<br>********** | |
| 11 | 1-790-926-21 | CORD (WITH CONNECTOR) (POWER) | |
| 105 | 1-823-602-21 | CABLE, FLEXIBLE FLAT 7P | |
| 251 | 1-823-603-21 | CABLE, FLEXIBLE FLAT (30 CORE) | |
| 257 | 1-823-604-11 | CABLE, FLEXIBLE FLAT (40 CORE) | |
| 311 | 1-777-246-21 | CORD (WITH CONNECTOR) (ANT) | |
| 313 | 1-790-355-31 | CORD (WITH CONNECTOR) (RCA)<br>(SUBWOOFER OUT (MONO)) | |
| 315 | 1-500-082-11 | CLAMP, SLEEVE FERRITE | |
| 353 | 1-668-780-11 | KEY CONNECTION FLEXIBLE BOARD | |
| 502 | 1-757-311-11 | CABLE, FLEXIBLE FLAT (11 CORE) | |
| 506 | A-3315-218-C | CHASSIS (OP) ASSY (included in M903) | |
| ⚠514 | X-3379-728-1 | OPTICAL PICK-UP (KMS-241C) | |
| 701 | X-3378-961-1 | CHASSIS ASSY (OP) (included in M102) | |
| 706 | 1-676-707-11 | PICK UP FLEXIBLE BOARD | |
| 707 | 1-677-182-11 | MOTOR FLEXIBLE BOARD | |
| ⚠710 | 8-820-103-11 | OPTICAL PICK-UP (KSS-720A/C-RP) | |
| F1 | 1-532-877-11 | FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V) | |
| M101 | A-3301-985-A | MOTOR ASSY, SLED | |
| M103 | A-3315-039-A | MOTOR SUB ASSY, LD (LOADING) (for CD) | |
| M640 | X-3377-884-1 | MOTOR ASSY (FRONT PANEL OPEN/CLOSE) | |
| M901 | A-3301-407-A | MOTOR ASSY, SP (SPINDLE) (for MD) | |
| M902 | A-3291-190-A | MOTOR ASSY, SL (SLED) (for MD) | |
| ********** | | | |
| | | ACCESSORIES<br>********** | |
| | 1-476-546-22 | REMOTE COMMANDER (RM-X110) | |
| | 3-230-549-01 | LID, BATTERY CASE (for RX-X110) | |
| | 3-235-550-11 | MANUAL, INSTRUCTION<br>(ENGLISH, TRADITIONAL CHINESE, KOREAN) | |
| | 3-235-551-11 | MANUAL, INSTRUCTION, INSTALL<br>(ENGLISH, TRADITIONAL CHINESE, KOREAN) | |
| ********** | | | |
| | | PARTS FOR INSTALLATION AND CONNECTIONS<br>********** | |
| 801 | 1-790-926-21 | CORD (WITH CONNECTOR) (POWER) | |
| 802 | 3-038-767-02 | FRAME (N), ORNAMENT | |
| 803 | X-3375-549-1 | SCREW ASSY (6) | |




The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

## REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

| Ver. | Date | Description of Revision |
|---|---|---|
| 1.0 | 2002.06 | New |
| | | |
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| | |